

U.S. ARMY CORPS OF ENGINEERS
CIVIL WORKS PROGRAM

CONGRESSIONAL SUBMISSION
FISCAL YEAR 2002

GREAT LAKES AND OHIO RIVER DIVISION

*Budgetary information will not be released
outside the Department of the Army until
3 April 2001*

Justification of Estimates for Civil Function Activities
Department of the Army, Fiscal Year 2002

GREAT LAKES AND OHIO RIVER DIVISION

Corps of Engineers

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SUMMARY, GREAT LAKES AND OHIO RIVER DIVISION

	<u>FY 2001 Allocation</u>	<u>FY 2002 Request</u>	<u>Increase or Decrease</u>
General Investigations			
Surveys	9,202,000	6,672,000	-2,530,000
Preconstruction Engineering and Design	6,163,000	7,328,000	+1,165,000
Subtotal, General Investigations	15,365,000	14,000,000	-1,365,000
Construction General			
Construction	293,267,000 1/	206,589,000 2/	-83,587,000
Dam Safety Assurance	18,420,000	12,311,000	-5,393,000
Subtotal, Construction General	311,687,000	218,900,000	-88,980,000
Operation and Maintenance			
Project Operation	170,470,000	170,057,000	-413,000
Project Maintenance	184,976,000	160,350,000	-24,626,000
Subtotal, Operation and Maintenance	355,446,000	330,407,000	-25,039,000
 Grand Total, Great Lakes and Ohio River Division	 682,498,000	 563,307,000	 -115,384,000

1/ Includes an estimated \$75,003,000 to be derived from the Inland Waterways Trust Fund in FY 2001.

2/ Includes an estimated \$54,451,000 to be derived from the Inland Waterways Trust Fund in FY 2002.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
1. SURVEYS - NEW: None.					
2. SURVEYS - CONTINUING:					
a. Navigation Studies.					
Ohio River Main Stem Systems Study, KY, IL, IN, PA, WV and OH Louisville District	45,300,000	39,891,000	3,465,000	1,500,000	444,000

The study is an inland navigation systems analysis to address the level of investments needed to provide an efficient navigation system on the Ohio River Main Stem. The study will identify the operation and maintenance, major maintenance, major rehabilitation and new construction investment needs for the navigation locks and dams along the Ohio River Main Stem, and/or in the pools and channels controlled by these structures. These structures are crucial to the orderly development of navigation throughout the Ohio River Basin. As traffic grows through the Ohio River Valley, several lock structures will experience increasing delays, which may be particularly severe during times of maintenance (when the existing chambers must be closed for routine or emergency repairs or accidents). Any closure of the main locks will result in severe traffic impacts. For the past ten years, traffic on the Ohio River has grown at an annual average rate of 2.0 percent. In 1999, total tonnage reached 241 million tons, reflecting a 22 percent increase over 1987.

This study is investigating the economic, social, and environmental impacts of both large scale investments and small scale improvements. Large scale improvements could involve constructing anew lock chamber at certain facilities, lengthening existing 600' chambers to provide at least two 1200' chambers where justified, or provision of replacement locks and dams at older facilities (such as Elmsworth, Dashields, or Montgomery Locks & Dams). Small scale improvements could include installation of permanent mooring cells near lock approach points (which could enhance tow mooring in queuing situations and possibly speed up double-cut processing), providing spare lock gates, new procedures to speed up lock maintenance, and other infrastructure or procedural opportunities. The study has also addressed ecosystem restoration opportunities.

FY 2001 funds are being used to continue engineering, economic, and environmental system analyses. The interim feasibility report for the Ohio River Ecosystem Restoration Program is scheduled for completion in September 2001.

FY 2002 funds will be used to continue engineering, economic, and environmental system analyses. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Great Lakes Navigational System, IL, IN, MI, MN, NY, OH, PA, WI Detroit District.	1,000,000	0	499,000	501,000	0

In accordance with Section 456 of the Water Resources Development Act of 1999 and in consultation with the St. Lawrence Seaway Development Corporation, initiate a review of the feasibility of undertaking any capital improvements to the Great Lakes navigation system including locks, dams, harbors, ports, channels, and other related features. The Great Lakes together with the St. Lawrence Seaway provides a continuous 2,400 mile deep draft waterway that extends from the western end of Lake Superior to the Gulf of St. Lawrence. The U.S. portion includes 136 harbors of which are 71 are commercial, seven locks, 138 miles of breakwater and jetties, and over 600 miles of 27 foot deep draft maintained navigation channel. The system supports average annual U.S. commerce of 175 million tons composed primarily of iron ore, stone, coal, cement, bulk liquids, salt and grain, which are critical to the nation and sustainable economic development. The study effort will be coordinated with waterway associations, port authorities, users of the system, Canada, and environmental interests.

The system review will identify the factors and trends that affect the character of the existing system and project future trends. This will include an evaluation of present and future commodity flows and the external factors that effect them and will determine the potential for national and regional economic development, environmental and institutional impacts with a view toward whether or not a detailed feasibility study should be undertaken. If the review determines there is a Federal interest in capital improvements, the follow on feasibility study would quantify system capacity constraints and corresponding modifications to improve overall efficiency.

FY 2001 funds are being used to initiate the reconnaissance phase. Activities will include formulating the scope of the study, developing traffic projections and economic models, initiate environmental coordination and developing preliminary engineering costs.

FY 2002 funds would be used to complete the reconnaissance report. The reconnaissance phase is scheduled for completion in September 2002.

TOTAL: Navigation Studies	46,300,000	39,891,000	3,964,000	2,001,000	444,000
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APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
b. Flood Damage Prevention Studies.					
Des Plaines River, IL & WI (Phase II) Chicago District	3,000,000	0	562,000	400,000	2,038,000

The Des Plaines River Basin starts in southwest Wisconsin and flows south into northeast Illinois. The study area, located in Lake and Cook Counties in northeastern Illinois and Kenosha County in southeast Wisconsin, has a drainage area of approximately 630 square miles. The Des Plaines River has a long history of flooding which has caused significant economic losses. The flood of record, in September 1986, caused an estimated \$35 million in damage to 10,000 dwellings and 263 business and industrial sites and severely impacted the entire transportation network in the Chicago metropolitan area--air, rail, and road. Section 419 of the Water Resources Development Act of 1999 directs that the Corps not exclude from consideration and evaluation flood damage reduction measures based on restrictive policies regarding the frequency of flooding, the drainage area, and the amount of runoff. Complementary to flood damage reduction, this study emphasizes formulating plans along the main stem and on 15 tributaries in both Illinois and Wisconsin that include environmental restoration and protection, improved water quality, and related recreation opportunities in this rapidly urbanizing portion of the Chicago area. The Illinois Department of Natural Resources provided a letter of intent in January 2000. The Feasibility Cost Sharing Agreement is scheduled to be executed in June 2001.

The preliminary estimated cost of the feasibility phase is \$6,000,000 which is to be shared on a 50/50 percent basis by Federal and non-Federal interests. A summary of the cost sharing is as follows:

Total Estimated Study Cost	\$6,000,000
Feasibility Phase (Federal)	3,000,000
Feasibility Phase (Non-Federal)	3,000,000

FY 2001 funds will be used to initiate Phase II of the feasibility study. FY 2002 funds will be used to continue the feasibility study. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Kankakee River Basin, IN Chicago District.	1,770,000	1,068,000	525,000	177,000	0

The Kankakee River Basin covers approximately 5,200 square miles in northeastern Illinois and Northwestern Indiana. More than one million people live within the basin. Local government officials from both Indiana and Illinois have requested a comprehensive evaluation of basin-wide flooding problems. The flooding problems throughout the basin have increased in frequency and severity through time causing annual damages to properties, natural resources, and agricultural lands. Current estimates indicate annual flood damages of about \$10.5 million. Additionally, ice jam flooding is a routine occurrence along the river, impacting a number of communities and causing structural damage to infrastructure. Sedimentation within the watershed is also a contributing factor to flooding. As a result, a systematic analysis of the problems and development of a basin-wide, comprehensive solution is being evaluated to reduce the impact of flood damages. The study is concentrating on flood damage prevention using traditional structural flood control techniques and ecosystem restoration methodologies. Prior to the turn of the century, the Kankakee River Basin from Mokena, Illinois to South Bend, Indiana was a major wildlife area comprised of over 400,000 acres of continuous wetland and woodland. This project will help to restore some of these former wetland /woodland areas. Possible solutions include levees, sedimentation traps, selective dredging, reconnection of river meanders, sidecast spoilbank removal, and wetland protection and ecosystem restoration. The two states, local communities and the Kankakee River Basin Commission have all expressed support for the study. The Feasibility Cost Sharing Agreement was executed in March 1999 (Illinois Department of Natural Resources) and October 1999 (Indiana Department of Natural Resources).

FY 2001 funds are being used to continue the feasibility phase. FY 2002 funds will be used to complete the feasibility phase. The estimated cost of the feasibility phase is \$3,260,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the cost sharing is as follows:

Total Estimated Study Cost	\$3,400,000
Reconnaissance Phase (Federal)	140,000
Feasibility Phase (Federal)	1,630,000
Feasibility Phase (Non-Federal)	1,630,000

The reconnaissance phase was completed in October 1999. The feasibility study is scheduled for completion in June 2002.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Licking River, Cynthiana, KY Louisville District	850,000	350,000	248,000	252,000	0

Cynthiana, Kentucky is located on the South Fork of the Licking River in Harrison County, approximately 25 miles north of Lexington, Kentucky, and 50 miles south of Cincinnati, Ohio. The Cynthiana area is subject to repeated flooding from the Licking River. In March 1997, major flooding of the Licking River occurred with flood damages estimated at \$45 million. The peak stage recorded at the gage at Cynthiana was 5 feet higher than any recorded previously in the nearly 60 years of record. Hundreds of people were left homeless in the aftermath of the flooding. In Cynthiana, 150 temporary housing units were provided for those who lost homes in the flooding. Homes, businesses, and roads were extensively damaged by the flooding. Harrison County was declared a Federal disaster area. Major flooding in the Licking River basin has also occurred in February 1989, March 1964, April 1948, and in January 1937. The Department for Local Government of the State of Kentucky is the study sponsor. The Feasibility Cost Sharing Agreement was executed in August 1999.

The reconnaissance study identified feasible alternatives including combinations of detention basins and channel modifications and non-structural measures that would provide significant flood damage reductions to Cynthiana, Paris and Millersburg.

The reconnaissance report was certified to be in accord with policy in September 1998. FY 2001 funds will be used to continue the engineering, economic, and environmental analysis of the flood damage reduction components. FY 2002 funds will be used to complete the feasibility study efforts. The estimated cost of the feasibility phase is \$1,500,000, which is cost shared on a 50-50 basis by the Federal Government and the non-federal sponsor. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$ 1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (Non-Federal)	750,000

The reconnaissance phase was completed in August 1999. The feasibility phase is scheduled to be completed in September 2002.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Metropolitan Louisville, Mill Creek Basin, KY Louisville District	850,000	139,000	187,000	264,000	260,000

The study area is located within the Mill Creek watershed in southwest Jefferson County, Kentucky. The study area is protected from flooding from the Ohio River by the Southwest Jefferson County Flood Protection system, which was completed in the late 1980's. However, there are nearly 3,300 homes and businesses, with an estimated value in excess of \$100 million, that are still subject to flooding from local streams. Approximately 3.5 square miles, or 10 percent, of the basin's entire drainage area is located in the designated floodplain. The most recent flooding in the basin occurred in August, 1992. Damages for this flood, estimated to have a recurrence interval of 10 to 20 years, were in excess of \$1 million. During the flood of record in March, 1964, approximately 900 residential properties were damaged. The study will evaluate solutions to the flooding problems. The solutions being considered are detention basins, as well as channel modifications, earth levees, and non-structural measures. The non-Federal sponsor for this study is the Louisville and Jefferson County Metropolitan Sewer District (MSD). MSD indicated by letter, dated February 9, 1996, that flooding in the Mill Creek Basin is one of its priority problem areas and that they understand the cost sharing requirements for the feasibility phase. The Feasibility Cost Sharing Agreement will be executed in May 2001.

FY 2001 funds are being used to initiate the feasibility study efforts consisting of hydrologic and hydraulic analysis, economic analysis, and preliminary design of the alternatives. FY 2002 funds will be used to continue feasibility study efforts consisting of an engineering, economic, and environmental analysis of the flood damage reduction components. The estimated cost of the feasibility phase is \$1,500,000, which is cost shared on a 50-50 basis by the Federal Government and the non-federal sponsor. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (non-Federal)	750,000

The reconnaissance phase will be completed in May 2001. The feasibility phase completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Metropolitan Louisville, Southwest, KY Louisville District	1,784,000	1,353,000	121,000	200,000	110,000

The Metropolitan Louisville, Southwest, study area encompasses a drainage area of approximately 24 square miles including the west and south ends of Louisville, Kentucky. The highly urbanized flood plain includes the campus area of the University of Louisville, the states second largest university, as well as the Churchill Downs neighborhood, site of historic Churchill Downs race course. The frequency of flooding has increased over the last few years as a result of overland and combined storm sewer overflows. Components of the existing local flood protection project are inadequate at high Ohio River stages. Flooding occurred in the study area in 1983, 1989, August 1992 (which included loss of life), and most recently in March 1997 when more than 5,000 residential and commercial structures, the Kentucky Fair and Exposition Center, the area around Churchill Downs, and the main campus of the University of Louisville were damaged. Average annual damages in the study area exceed \$5,000,000. Louisville and Jefferson County Metropolitan Sewer District (MSD) is a strong local sponsor. MSD executed the Feasibility Cost Sharing Agreement in June 1999.

The reconnaissance report recommended initiation of feasibility phase studies which would evaluate operational modifications and/or physical improvements to the pump stations located on the Ohio River associated with the existing Federally constructed flood damage prevention project. FY 2001 funds are being used to continue feasibility study efforts consisting of environmental studies, formulation of the recommended plan, and design and cost estimates of plan components; and, completing the hydrologic and economic evaluation of project alternatives. FY 2002 funds will be used to continue the feasibility study efforts. The estimated cost of the feasibility phase is \$2,320,000, which is cost shared on a 50-50 basis by the Federal Government and the non-Federal sponsor. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,944,000
Reconnaissance Phase (Federal)	624,000
Feasibility Phase (Federal)	1,160,000
Feasibility Phase (Non-Federal)	1,160,000

The reconnaissance phase was completed in June, 1999. The feasibility phase completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Butler County, OH, Louisville District	850,000	0	100,000	100,000	650,000

The study area consists of Butler County, located in southwestern Ohio. Butler County covers approximately 513 square miles. The study area is drained by the Miami River; and its tributaries Seven Mile Creek, Four Mile Creek, and Indian Creek. In addition, the upper reaches of Mill Creek are located in the southeastern part of the county. In October of 1989, the unincorporated areas of the county joined the flood insurance program. The unincorporated areas cover almost 75% of the county. The most recent flooding occurred in March 1997, during which several communities suffered damages. Within the watershed approximately 1,200 homes and businesses, plus public facilities are subject to flood damages. Damages in 1997 were estimated at \$20 million. Possible flood damage reduction measures include channel modification, clearing and snagging, detention basins, small flood damage reduction reservoirs and non-structural measures. This study will also assess opportunities for ecosystem restoration and restoration of wetlands. The Feasibility Cost Sharing Agreement with the Butler County Board of Commissioners is scheduled to be executed in December 2001.

FY 2001 funds are being used to initiate and complete the reconnaissance phase of the study. If the section 905(b) analysis is certified to be in accord with policy, FY 2002 funds will be used to continue into the feasibility study efforts consisting of hydrologic and hydraulic analysis, economic analysis, soil borings, design of the alternatives, real estate estimates, and cost estimates. The estimated cost of the feasibility phase is \$1,500,000, which is cost shared on a 50-50 basis by the Federal Government and the non-Federal sponsor. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (non-Federal)	750,000

The reconnaissance phase is scheduled to be completed in December 2001. The feasibility phase completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Richland County, OH Huntington District	600,000	100,000	75,000	200,000	225,000

Richland County is located in north central Ohio approximately 65 miles north of Columbus. Portions of the Clear Fork and Black Fork River Basins are located within Richland County and are part of the Muskingum River Basin. Severe floods in the Clear Fork and Black Fork River Basins have repeatedly threatened lives and caused millions of dollars in damage. The most recent flooding occurred on 28 and 29 June 1998, during storms that led President Clinton to issue a disaster declaration for large parts of Ohio. The damage to Richland County communities of Belleville and Shelby was estimated to be \$1.4 million. Just a decade earlier, severe flooding caused millions of dollars in losses in this same area.

The Richland County Board of Commissioners is the study sponsor and is aware of the cost sharing responsibilities. A Letter of Intent from the Richland County Board of Commissioners dated 9 January 1998 requested the Corps to initiate a reconnaissance study. The Feasibility Cost Sharing Agreement is scheduled to be executed in July 2001. The study will address the chronic and persistent flooding problems and environmental restoration needs in the Mohican River Basin in Ohio with particular emphasis on the Clear Fork, Black Fork and Cedar Creek watersheds including Belleville, Mansfield, Butler and Shelby, Ohio. If the section 905(b) analysis is certified to be in accord with policy, FY 2001 funds are being used to initiate the feasibility study. FY 2002 funds will be used to continue the feasibility study.

Total Estimated Study Cost	\$1,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	500,000
Feasibility Phase (Non-Federal)	500,000

The reconnaissance phase is scheduled for completion in July 2001. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Davidson County, Mill Creek Watershed, TN Nashville District	910,000	110,000	75,000	105,000	620,000

Mill Creek is a major tributary of the Cumberland River in southeastern Davidson County and northwestern Williamson County. The Mill Creek watershed is 108 square miles and home to the federally listed endangered Nashville Crayfish. A recurrence of the May 1979 flood of record would cause an estimated \$93M in flood damages today. Homes and businesses in Williamson County, Brentwood, and Nolensville are subject to flooding. Corrective measures evaluated during the reconnaissance study include nonstructural measures, wetland restoration and enhancement to promote biodiversity. These outputs will be further refined during the feasibility phase. The Metropolitan Government of Nashville and Davidson County signed a letter of intent on March 9, 2001; additionally, Williamson County, City of Brentwood, and City of Nolensville have also indicated their interest in participating as a sponsor. The sponsors understand their cost sharing responsibilities. The Feasibility Cost Sharing Agreement is scheduled to be executed in July 2001.

FY 2001 funds will be used to initiate the feasibility phase. FY 2002 funds will be used to continue the feasibility phase. The estimated cost of the feasibility phase is \$1,600,000, which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of study cost sharing follows:

Total Estimated Study Cost	\$1,710,000
Reconnaissance Phase (Federal)	110,000
Feasibility Phase (Federal)	800,000
Feasibility Phase (Non-Federal)	800,000

The reconnaissance phase is scheduled for completion in July 2001. The completion date for the feasibility study is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
French Broad Watershed, TN Nashville District	706,000	125,000	230,000	280,000	71,000

The French Broad watershed encompasses 5 east Tennessee counties; Knox, Blount, Jefferson, Sevier and Cocke. New economic development has stimulated growth. With this has come a need for a complete evaluation of the region's environmental infrastructure including flood control, water supply, wastewater treatment, fish and wildlife enhancement, water quality, and ecosystem restoration. A Major flood in 1994 damaged over 300 residences, motels, and businesses. On April 14, 1994, President Clinton approved federal disaster assistance for five of the hardest-hit Tennessee counties, including Blount, Sevier, Unicoi, Polk and Hamilton counties. Assistance in Sevier County included \$352,000 for 130 temporary housing units, \$509,630 to repair damage to infrastructure, \$2,397,300 in SBA home loans and \$2,042,000 in SBA business loans. The reconnaissance study evaluated opportunities for flood control improvements and ecosystem restoration. The watershed harbors several federally listed endangered species, such as the Peregrine falcon, Northern river otter, and the Orange-foot pimpleback. Corrective measures to be refined during feasibility phase studies include both structural and nonstructural flood damage reduction measures consisting of floodwater detention ponds (dry dams), levees and floodwalls, as well as wetland restoration and enhancement to promote biodiversity. The sponsors for this project include the cities of Pigeon Forge, Gatlinburg, Sevierville and Knoxville. Each understands its cost sharing responsibilities and has expressed an interest in cost sharing the feasibility phase, by letters of intent dated November 24, 1998. The Feasibility Cost Sharing Agreement was executed on October 11, 2000.

FY 2000 funds were used to initiate the feasibility phase. FY 2001 funds are being used to continue the feasibility phase. FY 2002 funds will be used to continue the feasibility phase. The estimated cost of the feasibility phase is \$1,212,000, which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of study cost sharing follows:

Total Estimated Study Cost	\$1,312,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	606,000
Feasibility Phase (Non-Federal)	606,000

The reconnaissance phase was completed in October. The feasibility study completion date is being determined.

TOTAL: Flood Damage Prevention Studies	11,320,000	3,245,000	2,123,000	1,978,000	3,974,000
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APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
c. Shoreline Protection Studies - None.					
d. Special Studies.					
Indiana Harbor, IN Chicago District	3,100,000	100,000	375,000	250,000	2,375,000

The study area is located in northwest Indiana in the communities of Gary, East Chicago, and Hammond, Indiana. The study area covers 15.4 river miles, including the Indiana portion of the Grand Calumet River (with the exception of an area to be cleaned up by United States Steel) and the portions of the Lake George Canal and the Calumet Canal that are not part of the federal navigation channel. This area contains approximately two million cubic yards of bottom sediments that are highly contaminated with polynuclear aromatic hydrocarbons, metals (including lead and chromium), and PCB=s (below the Toxic Substance Control Act level), causing it to be designated an Area of Concern in the Great Lakes Water Quality Agreement. The Grand Calumet River/Indiana Harbor is a high priority clean-up area for the Indiana Department of Environment Management. Environmental dredging and habitat restoration of the area is the probable solution for this project. The sponsor is the Indiana Department of Environmental Management. A letter of intent was signed by the sponsor on September 28, 2000, and the Feasibility Cost Sharing Agreement is scheduled to be executed in June 2001.

FY 2001 funds are being used to complete the reconnaissance phase and, if the section 905(b) analysis is certified to be in accord with policy, initiate the feasibility phase of the study. FY 2002 funds will be used to continue the feasibility study. The estimated cost of the feasibility phase is \$6,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$6,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	3,000,000
Feasibility Phase (Non-Federal)	3,000,000

The reconnaissance phase is scheduled for completion in June 2001. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Wolf Lake, IL and IN Chicago District	550,000	90,000	10,000	100,000	350,000

Wolf Lake is located in northwest Hammond, Indiana, and southeast Chicago, Illinois. The Illinois-Indiana state line bisects the lake system. The lake covers 804 acres (419 acres in Illinois and 385 acres in Indiana) and has a maximum depth of 18 feet. The direct drainage area includes 925 acres of mostly pervious surfaces draining directly into the lake. The lake is separated into eight different sections by dikes constructed during sand and gravel dredging for the Indiana Tollway that crosses the lake. There are limited interconnections among the pools and Wolf Lake Channel. The area surrounding the lake is highly urbanized with vast industrial areas. Wolf Lake is used extensively for water-based recreation, which includes swimming, boating, picnicking, fishing, sail boating, windsurfing, waterfowl observation, and for such winter sports as ice-skating and ice fishing. The ecosystem degradation problem in Wolf Lake includes excessive weed growth, lack of plant diversity, lack of adequate depths caused in part by historical filling of the lake with industrial waste and other unknown materials, and poor water and sediment quality. Possible solutions include vegetation buffer along the Tollway, selective dredging of the pools and removal of portions of the dikes separating the lake into different pools. The Hammond Park District has indicated that they are willing and able to be the non-Federal sponsor for the Indiana portion of the study. The Feasibility Cost Sharing Agreement that will cover the Indiana portion of Wolf Lake is scheduled to be executed in August 2001.

FY 2001 funds will be used to complete the reconnaissance phase. If the section 905(b) report is certified to be in accord with policy, FY 2002 funds will be used to continue into the feasibility phase. The estimated cost of the feasibility phase is \$900,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the cost sharing is as follows:

Total Estimated Study Cost	\$1,000,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	450,000
Feasibility Phase (Non-Federal)	450,000

The reconnaissance phase is scheduled for completion in August 2001. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Metropolitan Region of Louisville, Jefferson County, KY Louisville District	850,000	100,000	75,000	325,000	350,000

The study area covers approximately 386 square miles and includes the metropolitan region of Louisville and extends over six counties: north central Kentucky (Jefferson, Oldham and Bullitt) and south central Indiana (Clark, Floyd and Harrison). The study area is drained by the Ohio River, Salt River, Pond Creek, Floyds Fork, Harrods Creek, Beargrass Creek, and Mill Creek in Kentucky, and Silver Creek in Indiana. Federally constructed projects in the area that have directly impacted the environment include the Louisville, KY Floodwall, the Southwest Jefferson County Levee and Floodwall, and McAlpine Locks and Dam. Most of Jefferson County was historically riparian, and there are many small waterways with floodplains and riparian corridors in varying states of degradation and development. In particular, the wall and levee systems of Louisville have blocked the natural Ohio River overflows, which naturally recharged wetland areas. Habitat will be restored for endangered species, such as the gray and Indiana bats, and for locally threatened species such as the Louisville crayfish. Drainage and flood damage reduction efforts will be linked to restoration of natural floodplain values, through the restoration of wetlands and riparian overbank areas, serving as flood water attenuation and storage areas. Habitat improvement measures, water control structures, moist soil management units, and reforestation will be analyzed. The Feasibility Cost Sharing Agreement with the Louisville and Jefferson County Metropolitan Sewer District (MSD) is scheduled to be executed in May 2001.

If the section 905(b) analysis is certified to be in accord with policy, FY 2001 funds will be used to continue into the feasibility study efforts consisting of hydrologic and hydraulic analysis, economic analysis, and preliminary design of the alternatives. FY 2002 funds will be used to continue the feasibility study efforts. The estimated cost of the feasibility phase is \$1,500,000, which is cost shared on a 50-50 basis by the federal Government and the non-Federal sponsor. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (non-Federal)	750,000

The reconnaissance phase is scheduled to be completed in May 2001. The feasibility phase completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Onondaga Lake, NY (Partnership) Buffalo District	2,102,000	1,122,000	262,000	350,000	368,000

Onondaga Lake, which is part of the New York State Barge Canal System and Oswego River Basin, has a total drainage area of 245 square miles and a surface area of 4.6 square miles. The city of Syracuse is located along the south shore of the Lake. Major tributaries to the lake are Onondaga Creek, Ninemile Creek and Ley Creek. The major water resource problem associated with the Lake is its degraded water quality. Currently, there is a ban on swimming and on the consumption of fish caught in the Lake. The poor quality deters optimal use of economic growth of the surrounding area. The Onondaga Lake Management Conference (OLMC) was established by Section 411 of the Water Resources Development Act of 1990 to develop and oversee the implementation of a Management Plan that identifies the causes of poor lake water quality and recommends a plan to reduce or eliminate the causes. The Management Plan has been completed and will be implemented by the Onondaga Lake Partnership. The Onondaga Lake Partnership is authorized under Section 573 of the Water Resources Development Act of 1999. The WRDA 99 legislation directs the Corps to establish a partnership with other Federal, State/local entities for the purpose of project development and implementation. The WRDA 99 authorizes the Corps to plan, design, and construct projects for the environmental restoration, conservation, and management of Onondaga Lake. The OLMC was dissolved in August 2000.

FY 2001 funds are being used to lead, administer, and manage the Onondaga Lake Partnership. Corps personnel are assigned as members of the four Partnership committees: Executive, Project, Resource, and Outreach. A project management plan with a schedule and database will be developed to track Onondaga Lake Management Plan projects. A Partnership web site will be established and maintained. FY 2002 funds will be used to continue to lead, manage, and administer Partnership activities. Funds will also be used to provide technical assistance to the Partnership, scope future projects and prepare future budgets, and negotiate with potential sponsors.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Tennessee River and Tributaries, Franklin, Macon County, NC Nashville District	393,000	213,000	25,000	155,000	0

The Upper Little Tennessee River is a major tributary of the Tennessee River in the vicinity of Franklin, North Carolina in western North Carolina along the Tennessee-North Carolina border. The TN River & Tributaries, Franklin Project Study Plan identified historical and recent sedimentation threatening the riparian areas and associated wetlands located in the Upper Little Tennessee River watershed. Historical sedimentation and recent sedimentation (urbanization of the upper watershed and agricultural practices) has clogged the channel of the Upper Little Tennessee River and collected in Lake Emory. The in-filling of Lake Emory threatens several federally endangered species (Spotfin Chub, Appalachian Elktoe, Pearly Mussel and Virginia Spiraea). Restoring the damaged portion of this unique ecosystem will benefit these federally endangered species. Corrective ecosystem restoration measures to be refined during feasibility phase studies include streambank stabilization, sediment manage and control, riparian zone restoration, and wetland creation and enhancement. Macon County, by letter of intent dated May 30, 1997 indicated an interest in cost-sharing the feasibility study. The Feasibility Cost Sharing Agreement was executed on July 8, 1999.

FY 2000 funds are being used to continue the feasibility phase. FY 2002 funds will be used to complete the feasibility study. The estimated cost of the feasibility phase is \$660,000, which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of study cost sharing follows:

Total Estimated Study Cost	\$723,000
Reconnaissance Phase (Federal)	63,000
Feasibility Phase (Federal)	330,000
Feasibility Phase (Non-Federal)	330,000

The reconnaissance phase was completed in July 1999. The feasibility study is scheduled to be completed in September 2002.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Columbus Metropolitan Area, Lower Big Darby Creek Basin, OH Environmental Restoration Huntington District	1,425,000	25,000	75,000	370,000	955,000

The study area encompasses the Big Darby Creek Basin located in the central part of Ohio within the counties of Pickaway, Franklin, Madison, Union, Logan, Champaign and Clark Counties. The Big Darby Creek Basin is approximately 40 miles long and 18 miles wide with a drainage area of 557 square miles. Big Darby Creek is a tributary of the Scioto River, which in turn is a tributary of the Ohio River. Little Darby Creek is the largest tributary and has a drainage area of 176 square miles or 31.5% of the total drainage area. Big Darby Creek represents one of the most biologically diverse aquatic systems in the Midwest, supporting more than 100 species of fish and 38 species of mussels. The watershed provides habitat for 14 species classified by the state or Federal government as endangered and 98 threatened or potentially threatened. Stresses to the Darby ecosystem result primarily from agricultural and expanding urban development. Sediment, nutrient and chemical loading from agricultural fields and the stormwater runoff from urbanizing areas represent the primary threats from an aquatic habitat and water quality perspective. Large intense pulses of water entering both the tributaries create threats from a hydrologic perspective. Such pulses can result in downstream flooding, the destabilization of stream banks, and the disruption of both streambed and riparian habitats. Possible solutions include wetland creation, restoration of aquatic habitat and hydrologic modeling that can be used as a management planning tool for evaluating future development. The Ohio Department of Natural Resources, the Nature Conservancy (Ohio Chapter), Mid-Ohio Regional Planning Commission, City of Columbus and the Darby Creek Restoration Association have expressed interest in being the cost sharing sponsor. The Feasibility Cost Sharing Agreement is scheduled for execution in July 2001.

The reconnaissance report was certified to be in accord with policy in July 2000. Upon certification of the section 905(b) analysis as consistent with policy, FY 2001 funds will be used to continue into the feasibility phase of the Lower Big Darby Creek study. FY 2002 funds will be used to continue work on the feasibility study. The preliminary estimated cost of the feasibility phase is \$2,800,000, which is to be cost shared 50/50.

Total Estimated Study Cost	\$2,825,000
Reconnaissance Phase (Federal)	25,000
Feasibility Phase (Federal)	1,400,000
Feasibility Phase (Non-Federal)	1,400,000

The reconnaissance phase is scheduled for completion in July 2001. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Columbus Metropolitan Area, Upper Big Darby Creek, OH Environmental Restoration Huntington District	375,000	27,000	283,000	65,000	0

The reconnaissance phase of this study investigated the water resource related problems, primarily urban flooding and environmental restoration opportunities within the Columbus Metropolitan Statistical Area (MSA) and surrounding counties including Franklin, Pickaway, Delaware, Licking, Marion and Fairfield, Ohio. Nine potential projects were identified in the recon report including the Upper Big Darby Creek environmental restoration project. Big Darby Creek drains approximately 557 square miles west of Columbus in central Ohio and is one of the most diverse warm freshwater systems of its size in the Midwest. The watershed has suffered over a 90% decline in wetland acres. The headwaters are currently being threatened by conversion from agricultural use and open space to urban development. Approximately 1,000 linear feet of stagnant waters exist along a channelized area in the Upper Big Darby. Continued development will contribute to further degradation of the national resources of Big Darby Creek. The Nature Conservancy has provided a Letter of Intent dated 20 October 1999 to share in the feasibility phase study for the environmental restoration project along Big Darby Creek which includes stream and wetland restoration of approximately 200 acres. The Feasibility Cost Sharing Agreement is scheduled for execution in April 2001.

The reconnaissance report will be certified to be in accord with policy, in July 2000. Upon certification of the section 905(b) analysis as consistent with policy, FY 2001 funds are being used to continue the feasibility phase of Upper Big Darby Creek. FY 2002 funds will be used to complete the feasibility Study. The preliminary estimated cost of the feasibility phase is \$700,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$ 725,000
Reconnaissance Phase (Federal)	25,000
Feasibility Phase (Federal)	350,000
Feasibility Phase (Non-Federal)	350,000

The reconnaissance phase is scheduled for completion in April 2001. The feasibility study is scheduled for completion in September 2002.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Hocking River Basin Environmental Restoration, Monday Creek, OH Huntington District	556,000	150,000	228,000	178,000	0

The Monday Creek watershed of the Hocking River basin study area encompasses 116 square miles of Perry, Athens, and Hocking Counties, Ohio. The focus of the study for the Monday Creek watershed is environmental restoration. Extensive portions of the Monday Creek watershed, of the Hocking River drainage area, have been subjected to underground and surface mining. Severe acid mine drainage and erosion from disturbed land areas have accelerated sedimentation in over 100 miles of streams of the area. A number of stream reaches are essentially sterile and unable to support diverse aquatic life. Communities affected within this environmentally degraded watershed are Nelsonville, Buchtel, Murray City, Carbon Hill, New Straightsville, Gore, Greendale, Maxville, and Bristol.

The study is evaluating the applicability and feasibility of various restoration solutions to the overall degradation of the ecosystem. Environmental restoration activities include limited stream restoration, wetland creation and wildlife habitat restoration involving both active and passive treatment of acid mine drainage. The Ohio Department of Natural Resources, Division of Mines and Reclamation signed the Feasibility Cost Sharing Agreement for the project on 27 April 2000.

The reconnaissance report was certified to be in accord with policy in November 1997. FY 2001 funds are being used to continue the feasibility study. FY 2002 funds will be used to complete the feasibility study. The preliminary estimated cost of the feasibility phase of \$1,012,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,062,000
Reconnaissance Phase (Federal)	50,000
Feasibility Phase (Federal)	506,000
Feasibility Phase (Non-Federal)	506,000

The reconnaissance phase was completed in April 2000. The feasibility study is scheduled for completion in September 2002.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Hocking River Basin Environmental Restoration, Sunday Creek, OH Huntington District	700,000	50,000	150,000	200,000	300,000

The Sunday Creek watershed of the Hocking River basin study area encompasses 139 square miles of Perry, Athens, and Morgan Counties, Ohio. The focus of the study for the Sunday Creek watershed is environmental restoration. Extensive portions of the Sunday Creek watershed, of the Hocking River drainage area, have been subjected to underground and surface mining. Severe acid mine drainage and erosion from disturbed land areas have accelerated sedimentation in over 110 miles of streams of the area. A number of stream reaches are essentially sterile and unable to support diverse aquatic life. Communities affected within this environmentally degraded watershed are Chauncey, Mill Field, Jacksonville, Tremble, Glouster, Corning, Rendville, Shawnee, and Hemlock.

The study is evaluating the applicability and feasibility of various restoration solutions to the overall degradation of the ecosystem. Environmental restoration activities include limited stream restoration, wetland creation and wildlife habitat restoration involving both active and passive treatment of acid mine drainage. The Ohio Department of Natural Resources, Division of Mines and Reclamation understands its cost sharing responsibilities and have indicated intent to share equally in the feasibility study phase. The Ohio Division of Mines and Reclamation has provided a letter of intent, dated October 28, 1996, indicating its interest in acting as a cost sharing sponsor for the project. The Ohio Environmental Protection Agency (OEPA) also has indicated its interest in the restoration project. The Feasibility Cost Sharing Agreement is scheduled to be executed in July 2001.

The reconnaissance report was certified to be in accord with policy in November 1997. FY 2001 funds will be used to initiate the feasibility phase of the study. FY 2002 funds will be used to continue feasibility phase studies. The preliminary estimated cost of the feasibility phase of \$1,300,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,350,000
Reconnaissance Phase (Federal)	50,000
Feasibility Phase (Federal)	650,000
Feasibility Phase (Non-Federal)	650,000

The reconnaissance phase is scheduled to be completed in July 2001. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Muskingum Basin System, Dillon Lake, OH Huntington District	575,000	100,000	75,000	400,000	0

The Muskingum River Lakes system includes 16 completed projects, regulating the runoff of a drainage area of 5,060 square miles, or 63 percent of the entire basin area. Mining is still prevalent within the basin. The original reservoir system, consisting of 14 projects (now between 56 and 59 years old), was completed in 1938. Two more projects were constructed and completed in 1959 and 1972. The 14 original projects are operated for flood control, recreation, and water conservation. The two newer projects are operated for flood control, general recreation, F&WL conservation, and low flood augmentation. The reconnaissance study focused on five areas of concern: the flood control system, floodplain management, environmental restoration, recreation, and water supply. A number of potential projects were identified under each category.

The feasibility Study will address Dillon Lake. The environment of the upper reaches of the lake are significantly impacted by sedimentation. The aquatic habitat is degraded, benthos impacted and fisheries are impaired. In addition there are impacts to existing recreation facilities. The feasibility study will include alternatives primarily directed toward improving the sediment retention function of the lake, including improving the handling efficiency of arriving sediments, protection of wetlands, improving fishery, and creating additional wetlands for the fine sediment filtration. Incidental benefits of the project would include enhanced aesthetics and improved recreational opportunities.

The Ohio Department of Natural Resources (ODNR) has agreed to serve as the study sponsor. A meeting between ODNR and the Corps of Engineers was held at Dillon Lake on March 6, 2001. ODNR understand their cost sharing responsibilities and have indicated an intent to cost share in the feasibility study phase by providing a letter dated January 11, 2001. The Feasibility Cost Sharing Agreement is scheduled to be executed in July 2001. FY 2001 funds are being used to initiate the feasibility study. FY 2002 funds will be used to complete the feasibility study.

Total Estimated Study Cost	\$1,050,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	475,000
Feasibility Phase (Non-Federal)	475,000

The reconnaissance phase is scheduled for completion in July 2001. The feasibility study for Dillon Lake is scheduled for completion in September 2002.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Powell River Watershed, VA Nashville District	1,477,000	900,000	165,000	100,000	312,000

The Powell River originates in southeast Virginia and flows southwest across the Tennessee border, where it empties into the Clinch River. Restoring the damaged portions of this unique ecosystem will benefit the eleven endangered mussel species and 2 threatened fish species. The Powell River Watershed Project Study Plan identified 12 contaminated creeks that contribute to the ecosystem degradation of the Powell River watershed. These creeks will be evaluated in 3 interim feasibility reports that will develop a watershed management plan containing potential corrective measures. The interim feasibility reports will evaluate measures which provide modification of hydrology or substrate by eliminating heavy metals in the water and increasing the ph of the water to normal levels through use of active (filtration) and passive (weirs, impoundment and wetland creation) stems for restoration of the ecosystem. The Lee-Norton-Wise-Scott-Planning District Commission (LENOWISCO), by letter of intent dated November 26, 1996, indicated an interest in cost-sharing the feasibility study. The Feasibility Cost Sharing Agreement was executed on July 20, 1998. The Ely and Pucketts Creeks interim report was completed in May 2000. The interim report for Straight, Reeds, Jones, and Cox Creeks will be completed in December 2002. An additional interim report on Jordan Branch, Craborchard Creek, Pigeon Creek and Bundy Creek is scheduled in the future.

FY 2001 funds are being used to continue the Straight, Reeds, Jones and Cox Creeks interim report. FY 2002 funds will be used to complete the Straight, Reeds, Jones and Cox Creeks interim report. The estimated cost of the feasibility phase is \$2,754,000 which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of study cost sharing follows:

Total Estimated Study Cost	\$2,854,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,377,000
Feasibility Phase (Non-Federal)	1,377,000

The completion date of the final feasibility study is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Tentative Allocation FY 2001 \$	Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
New River Basin, Stroubles Creek, VA Huntington District	865,000	100,000	100,000	200,000	465,000

The New River Basin Reconnaissance Study Report (Section 905(b)), dated October 2000, evaluated the potential for Federal interest in implementing solutions to flooding, ecosystem degradation and other related water resource problems and opportunities in the New River Basin. One of the locations where potential Federal projects were identified, and which has significant non-Federal support, is the Stroubles Creek watershed. The Stroubles Creek watershed is located in Montgomery County, Virginia and lies partially within the cities of Radford and Blacksburg, Virginia. The watershed contains approximately 24 square miles and drains a variety of residential, commercial, institutional, farmland and forested lands. Several areas within the watershed are experiencing flood damage from relatively low frequency storm events. First floors of structures on the Virginia Tech campus including the War Memorial Gymnasium and the Donaldson Brown Hotel and Conference Center were damaged in May 1992 (\$4.5 million in flood damages). These facilities are suffering repeated damages during the 2-year to 100-year frequency flood events and several areas of the watershed are experiencing severe channel erosion due to high flood flows. The Town of Blacksburg, VA has constructed several retention basins in the watershed, but flood damages continue to occur. In terms of aquatic and environmental restoration, Stroubles Creek is included on the Commonwealth of Virginia's 1998 303(d) Impaired Waters List with ongoing deterioration of the stream's benthic community due to non-point sources in the watershed. The principle purposes of the feasibility study would be to further identify specific flooding problems in the watershed for which feasible alternatives could be formulated and to assess the extent of ongoing damages to the stream corridor environment due to high flows and non-point source run-off. Given the characteristics of the watershed, flood damage reduction measures such as stream channel modifications and nonstructural floodproofing and relocations will likely be evaluated for the watershed. The district received a letter of intent, dated 10 October 2000, from the Virginia Polytechnic Institute to cost share a feasibility study of the Stroubles Creek Watershed. The Feasibility Cost Sharing Agreement is scheduled for execution in August 2001. If the section 905(b) report is certified to be in accord with policy, FY 2001 funds will be used to initiate the feasibility study. FY 2002 funds will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$1,530,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing follows:

Total Estimated Study Cost	\$1,630,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	765,000
Feasibility Phase (Non-Federal)	765,000

The reconnaissance phase is scheduled for completion in August 2001. The feasibility study completion date for Stroubles Creek is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
TOTAL: Special Studies	12,968,000	2,977,000	1,823,000	2,693,000	5,475,000
TOTAL SURVEYS - CONTINUING	70,588,000	46,113,000	7,910,000	6,672,000	9,893,000
TOTAL SURVEYS - NEW & CONT	70,588,000	46,113,000	7,910,000	6,672,000	9,893,000
3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - NEW: None.					
4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING:					
a. Navigation.					

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Waukegan Harbor, IL (1970 Mod.) Chicago District	375,000	0	215,000	160,000	0

Waukegan Harbor, Illinois is on the western shore of Lake Michigan, 16 miles south of Kenosha and 38 miles north of Chicago, Illinois. Waukegan Harbor is the only deep-draft commercial harbor between Milwaukee and Chicago capable of handling large shipments of cement, gypsum, and other building materials. Average annual waterborne commerce at the harbor during the last 10 years was 450,000 tons. Dredging at the Waukegan Inner Harbor area has not occurred since 1969 due to the presence of contaminated sediment and the lack of a confined disposal facility. A feasibility study is underway and scheduled for completion with a DE Notice in August 2001. The feasibility effort consists of evaluating a maintenance dredging plan in combination with harbor deepening and clean-up in two slip areas outside the authorized channel. Existing Federal improvements at Waukegan Harbor consist of dredged navigation channels, piers, and a breakwater. Uncompleted work authorized in 1970 includes deepening the existing entrance channel in the outer harbor from 22 to 25 feet; deepening the channel between piers from 18 to 23 feet; and deepening the inner basin from 18 to 23 feet and extending its limits approximately 275 feet northward. However, additional depths up to 27 feet in the inner harbor and 30 feet in the outer harbor are being evaluated. The project cost is estimated to be \$15 million of which up to 40-percent would be a non-Federal sponsor cost. The average annual navigation cost saving benefits amount to \$2,500,000 and the benefit-cost ratio is 2 to 1 based upon a November 1999 economic analysis. The Waukegan Port District, which signed the Feasibility Cost Sharing Agreement in August 1998 is the local sponsor for Preconstruction Engineering and Design (PED).

PED will ultimately be cost shared in accordance with the Water Resources Development Act of 1996 at a minimum non-Federal share of 35 percent but will be financed through the PED period at a non-Federal share of 25 percent. Adjustments necessary to bring the non-Federal contribution in line with construction cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design	\$500,000	Total Estimated Preconstruction Engineering and Design	\$500,000
Initial Federal Share	375,000	Ultimate Federal Share	325,000
Initial Non-Federal Share	125,000	Ultimate Non-Federal Share	175,000

The project was authorized for construction by House Resolution dated December 17, 1970, and Senate Resolution dated December 8, 1970. FY 2001 funds will be used to initiate PED. FY 2002 funds will be used to complete PED in September 2002.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
John T. Myers Locks and Dam, IN and KY Louisville District	8,000,000	459,000	1,853,000	2,100,000	3,588,000

John T. Myers Locks and Dam are located on the Ohio River 846.0 miles below Pittsburgh, Pennsylvania, near Uniontown, Indiana. The present navigation locks are on the Indiana side of the river near Mt. Vernon, Indiana, and consist of a 110 X 1,200-foot main lock and one auxiliary lock of 110 X 600 foot placed in operation in 1975. A proposed modernization of the existing facility would extend the auxiliary (110 X 600 foot lock) to become the second 110 X 1,200 foot lock. Tonnages through Myers locks are expected to grow annually from the 1999 figure of 71.4 million tons to 154.0 million tons in 2060. These tonnage projections indicate that Myers locks represent the next potential traffic bottleneck in the mainstem Ohio River system following Gallipolis and Olmsted. The need for a new lock is in response to identified annual increases in tonnage levels and delays. About 44 percent of the present traffic is coal. The feasibility report for the Myers interim was completed in May 2000 with the issuance of the Division Commanders public notice. The reports anticipated recommendation is construction of an extension to the existing auxiliary lock. The estimated project cost is \$225,000,000, with net average annual incremental benefits of \$8,600,000 attributable to navigation. The benefit to cost ratio is 1.8 to 1 based on an interest rate of 6 5/8 percent. The project was authorized for construction in WRDA 2000. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the costs of construction would be derived from the Inland Waterways Trust Fund.

FY 2001 funds are being used to continue Preconstruction Engineering and Design for foundation explorations and hydraulic studies. FY 2002 funds will be used to continue foundation exploration analysis, hydraulic model studies and engineering analyses, and preparation of the project Design Documentation Reports. The Preconstruction Engineering and Design phase completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Greenup Locks and Dam, KY and OH Huntington District	5,700,000	200,000	1,122,000	2,372,000	2,006,000

Greenup Locks and Dam project is located on the left descending bank of the Ohio River near Greenup, KY, 341.0 miles downstream of Pittsburgh, PA. The existing project consists of a non-navigable, high-lift gated dam with a top length of 1,287 ft. and two parallel lock chambers. The lock chambers, the main lock chamber is 110' X 1200' and the auxiliary lock is 110' X 600', came into service in 1959. Current projections indicate that by the year 2010, tonnage at the Greenup project will exceed 90 million tons. The 2010 traffic level will exceed the effective capacity of the main lock, so that the auxiliary lock will be regularly required to process traffic. At this point, closure of either lock, for maintenance or in the event of an accident, will generate massive delays and associated increased costs to industry. Additional lock capacity will be required or the delay experience of 1998 will become more likely and lengthier as these locks age. Industry costs associated with these closures will grow. This project enjoys the support of regional and national waterway interests, especially towing companies. The feasibility report was completed in April 2000, and the Division Commanders public notice was signed on 24 May 2000. The NED plan is an extension of the existing 600' auxiliary lock. The current estimated project cost is \$241,300,000 (October 1999 price level), which includes the major rehabilitation of the locks, with average annual incremental benefits of \$26,500,000. The benefit to cost ratio is 2.5 to 1 based on an interest rate of 6 5/8 percent. In accordance with the cost sharing and financing concepts in the Water Resources Development Act of 1986, 50 percent of the construction cost would be derived from the Inland Waterways Trust Fund.

Total Estimated Preconstruction Engineering and Design Costs	5,700,000	Total Estimated Preconstruction Engineering and Design Costs	5,700,000
Initial Federal Share	5,700,000	Ultimate Federal Share	5,700,000
Initial Non-Federal Share	0	Ultimate Non-Federal Share	0

The project was authorized under WRDA 2000. FY 2001 funds will be used to continue Preconstruction Engineering and Design (PED) consisting mainly of geotechnical and hydraulic studies, plans and specs for the mooring facility, and model studies for mitigation. FY 2002 funds will be used to continue PED. The PED completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Sault Ste. Marie (Replacement Lock), MI Detroit District	5,604,000	1,604,000	998,000	1,530,000	1,472,000

The St. Marys River project at Sault Ste Marie, Michigan, the Soo Locks, provides a vital link between Lake Superior and the lower Great Lakes to facilitate the efficient flow of commerce. The project includes four navigation locks, connecting channels, compensating works for the regulation of Lake Superior, and a 21 megawatt hydroelectric power plant. During the 1998 navigation season, over 86 million tons of commerce, consisting principally of iron ore, western coal, and grain, passed through this facility. Over 75 percent of the iron ore produced in the U. S. transits through the Soo Locks to the steel mills in Indiana, Michigan, Ohio, Pennsylvania and West Virginia. Currently, two locks, the MacArthur and Poe, service loaded commercial vessel traffic. The larger Poe Class vessels, including the 1,000-footers, which comprise 70 percent of the carrying capacity of the U.S. Great Lakes Fleet, are restricted to the large Poe Lock. The Davis Lock is rarely used and the Sabin Lock is in disrepair and has been closed for several years. No major repairs have been implemented on the MacArthur Lock since its construction in 1948. The 1986 and 1990 Water Resource Development Acts (WRDA) authorized the construction of a new Poe-sized lock to replace the existing Davis and Sabin Locks at Sault Ste. Marie, Michigan. The 1996 WRDA includes a provision that the United States would pay the portion of the non-Federal share allocated to users calling at Canadian ports, and allows the non-Federal sponsor 50 years to contribute its share. The 1999 WRDA waived interest on the non-Federal payments. A Limited Reevaluation Report (LRR) was completed in October 2000, documents average annual benefits of \$2,067,000 attributable to navigation and a benefit to cost ratio of 1.15 to 1 based on an interest rate of 6-5/8 percent. The recommended project, which consists of the construction of a new Poe-sized lock at the site of the Davis and Sabin Locks, is estimated to cost \$179,976,000 (October 2000 price levels) with an estimated Federal cost of \$137,142,000 and an estimated non-Federal cost of \$42,834,000. Construction of this lock would minimize the impacts of a disruption at the Poe Lock. The Great Lakes States have expressed interest in the project and have agreed upon a cost sharing formula. The Great Lakes Commission passed a resolution in September 1999 to act as the local sponsor, representing the States. PED does not require non-Federal funds up front, but would be ultimately cost shared at the rate for the project.

Total Estimated Preconstruction	
Engineering and Design Costs	\$5,604,000
Initial Federal Share	5,604,000
Initial Non-Federal Share	0

Total Estimated Preconstruction	
Engineering and Design Costs	\$5,604,000
Ultimate Federal Share	4,270,000
Ultimate Non-Federal Share	1,334,000

FY 2001 funds would be used to continue preconstruction engineering and design efforts, including completion of the the final Limited Reevaluation Report. FY 2002 funds would be used to continue PED. The PED completion date is being determined.

TOTAL: Navigation	19,679,000	2,263,000	4,188,000	6,162,000	7,066,000
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APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
b. Flood Control.					
Island Creek at Logan, WV Huntington District	3,550,000	1,977,000	90,000	483,000	1,000,000

The Island Creek at Logan, West Virginia Local Protection Project consists of channelization of the lower 0.7 miles of Island Creek to a bottom width of 80 feet. This area experienced major flooding in 1957, 1963, 1974, 1977 and 1984. The Corps completed a study in 1993 that recommended a project to reduce significant flooding which has a positive benefit-to-cost ratio of 1.6 to 1. The project, with an estimated cost of \$20,700,000 (price level October 2000) with a Federal cost of \$12,718,000 and non-Federal cost of \$7,982,000, has been inactive since FY 1994 at the request of the local sponsor, the Logan County Commission. The Commission, at that time, was unable to provide the non-Federal share of project implementation costs, but have recently received a commitment of financial support from the state of West Virginia and has indicated a willingness to act as non-Federal cost sharing sponsor for this project. The average annual benefits are estimated at \$2,507,000 at the October 2000 price level and a benefit to cost ratio of 1.3 to 1 based on an interest rate of 6 3/8 percent. In a letter dated 27 July 1998, the West Virginia Soil Conservation Agency reaffirmed its intent to cooperate with the Logan County Commission to proceed with the project. PED will ultimately be cost shared at the rate for the project to be constructed (75/25) but will be financed through the PED phase at 100% Federal financing. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished during initial construction funding.

Total Estimated Preconstruction Engineering and Design Costs	\$3,550,000	Total Estimated Preconstruction Engineering and Design Costs	\$3,550,000
Initial Federal Share	3,550,000	Ultimate Federal Share	2,662,000
Initial Non-Federal Share	0	Ultimate Non-Federal Share	887,500

The project is authorized for construction by Section 401 of the 1986 Water Resources Development Act, PL 96-662. FY 2001 funds are being used to continue detailed design and plans and specifications. FY 2002 funds will be used to continue PED. The PED completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Mercer County, Brush Creek Basin, WV Huntington District	1,000,000	0	0	100,000	900,000

Mercer County, located in the southern part of West Virginia, has a desirable topography for economic development and the county has become one of the six leading growth centers in the state. Existing flood control measures have proven to be inadequate to prevent flood damages. In 1995 and 1996, heavy flooding in the county resulted in substantial damages. The flooding in 1995 resulted in damages in excess of eight million dollars. The Feasibility study is scheduled for completion in December 2001. The study will address comprehensive flood damage prevention for Mercer County, including the Brush Creek Basin which is the primary area of growth in Mercer County. The recommended project for the Brush Creek Basin is estimated to cost \$1.8 million with an estimated Federal cost of \$1.17 million and an estimated non-Federal cost of \$0.63 million, and includes a combination of channel modifications and various non-structural measures. The average annual benefits for the Brush Creek Basin project are estimated at \$350,000, all for flood control. The benefit to cost ratio is 2.9 to 1 based on the latest economic analysis dated October 2000. The Mercer County Commission is the local sponsor. The sponsor fully understands the cost sharing requirements, has funds available and is ready to proceed with the project. PED will be cost shared at the rate for the project to be constructed, but will be financed through the PED phase at 25% non-Federal.

Total Estimated Preconstruction Engineering and Design Costs	\$1,333,000	Total Estimated Preconstruction Engineering and Design Costs	\$1,333,000
Initial Federal Share	1,000,000	Ultimate Federal Share	1,000,000
Initial Non-Federal Share	333,000	Ultimate Non-Federal Share	333,000

The project is authorized for construction by Section 401 of the 1986 Water Resources Development Act, PL 96-662. FY 2002 funds would be used to initiate PED consisting of development of plans and specifications for structural and nonstructural flood control measures. The PED completion date for the Brush Creek Basin is being determined.

TOTAL: Flood Control	4,550,000	1,977,000	90,000	583,000	1,900,000
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APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost FY 2001 \$	Allocation Prior to FY 2001 \$	Allocation FY 2002 \$	Tentative Allocation After FY 2002 \$	Additional to Complete \$
c. Watershed/Ecosystem.					
Ashtabula River Environmental Dredging, OH Buffalo District	900,000	25,000	224,000	583,000	68,000

The Ashtabula River is located on the south shore of Lake Erie, 59 miles east of Cleveland, Ohio. The feasibility study recommends a remediation plan for contaminated sediments in the Ashtabula River and Harbor system including the Federal channel, to provide depths required for commercial navigation, ecosystem restoration and water quality improvement. The Corps, in conjunction with the Ashtabula River Partnership (ARP), prepared the feasibility study known as a Comprehensive Management Plan and Environmental Impact Statement (CMP/EIS). The formal public review period has closed and responses to comments and associated revisions to the CMP/EIS are being made. This project is justified, funded and cost shared under three separate authorities: One project reach is justified based on a combination of existing O&M Authorities and Section 312(a) of WRDA 1990, while the remainder of the project is justified under Section 312(b) of WRDA 1990. The design work for 312(b) will be accomplished with PED funding. The entire recommended project (O&M, 312(a) and 312(b)) has a total estimated cost of \$42,380,000, with an estimated Federal cost of \$28,430,000 and consists of dredging 696,000 cy of contaminated sediments, a transfer/dewatering facility, and construction of upland confined disposal facilities. The project sponsor, the Ashtabula County Port Authority, provided a Letter of Intent dated May 28, 1998. The 312(b) PED work is estimated to cost \$1,200,000 (\$600,000 for the dredging and \$600,000 for the disposal). The ultimate non-Federal PED cost sharing is 65% for the dredging and disposal.

Preconstruction Engineering and Design (PED) will ultimately be cost shared in accordance with project cost sharing, but will be financed through the PED period at a non-Federal share of 25 percent. Adjustments necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated PED Costs	\$1,200,000
Initial Federal Share	900,000
Initial Non-Federal Share	300,000

Total Estimated PED Costs	\$1,200,000
Ultimate Federal Share	780,000
Ultimate Non-Federal Share	420,000

FY 2001 funds will be used to continue PED for the portion of the project providing ecosystem restoration outputs. FY 2002 funds will be used to continue PED efforts. The PED completion date is being determined.

TOTAL: Watershed/Ecosystem	900,000	25,000	224,000	583,000	68,000
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APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
TOTAL PED - CONTINUING	25,129,000	4,265,000	4,502,000	7,328,000	9,034,000
TOTAL PED - NEW & CONTINUING	25,129,000	4,265,000	4,502,000	7,328,000	9,034,000
GRAND TOTALS - SURVEYS & PED	95,717,000	50,378,000	12,412,000	14,000,000	18,927,000

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Olmsted Locks and Dam, Illinois and Kentucky (Continuing)

LOCATION: The project is located in Pulaski County, Illinois and Ballard County, Kentucky on the Ohio River near Olmsted, Illinois, approximately 964 miles downstream from Pittsburgh, Pennsylvania.

DESCRIPTION: The project will replace Ohio River Locks and Dams 52 and 53. The new structure will consist of two 110 by 1200 foot locks adjacent to the Illinois shore and a dam comprised of tainter gates, navigable pass, and a fixed weir. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1988.

REMAINING BENEFIT-REMAINING COST RATIO: 10.1 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: 3.5 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 3.7 at 8 7/8 percent (FY 1991).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the Olmsted Locks and Dam Benefit Update, dated October, 1990.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$1,052,000,000	Entire Project	45	Being Determined
General Appropriations	\$526,000,000				
Inland Waterway Trust Fund	526,000,000				
PHYSICAL DATA					
Estimated Non-Federal Cost		0	Lock - 110 by 1,200 foot Chambers		2
			Dam - Navigable Pass		1,400 ft.
Total Estimated Project Cost		\$1,052,000,000	Fixed Weir		561 ft.
			Tainter Gates		744 ft.
			Acres – Dam		123 acres
			Road		21 acres
			Disposal Area		114 acres
			Flow Easements		35 acres

Division: Great Lakes & Ohio River

District: Louisville

Olmsted Locks and Dam, IL & KY

3 April 2001

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SUMMARIZED FINANCIAL DATA (Continued)	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2000	228,263,000	228,263,000	43
Conference Allowance for FY 2001	28,000,000	28,000,000	
Allocation for FY 2001	27,478,000 ^{1/}	27,478,000 ^{1/}	
Allocations through FY 2001	255,741,000	255,741,000	49
Allocation Requested for FY 2002	17,000,000	17,000,000	52
Programmed Balance to Complete after FY 2002	253,259,000	253,259,000	100
Unprogrammed Balance to Complete after FY 2002	0	0	

^{1/} Reflects a reduction of \$4,480,000 assigned as savings and slippage, \$4,013,000 reprogrammed to the project, and \$55,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: The project is in a strategic location on the inland waterway system. Virtually all waterway traffic moving between the Ohio River and tributaries and the Mississippi River and tributaries passes through the project area. Olmsted Locks and Dam will replace existing Ohio River Locks and Dams 52 and 53, which are over 70 years old. Both projects have temporary lock chambers that are inefficient and neither project conforms to current design criteria for structural stability. Commercial navigation in 1998 was 97.7 million tons through Lock 52. Historically, tonnage growth has been steady and is expected to continue in the long term. In the 19 year period 1980 to 1998, tonnage levels increased a total of 47 percent. The long term (2010-2030) average annual growth rate is projected to be 0.8 percent. The value of the commodities through the project area in 1998 was estimated at \$20 billion. Energy-related commodities comprised approximately 50 percent of the total tonnage, with grains and chemicals each contributing approximately 11 and 10 percent, respectively, of total tonnage. The projected increases in waterway traffic demands in combination with the limited capacity of the existing locks will result in increased lockage delays.

The following counties qualify as areas of "substantial and persistent" unemployment: Illinois - Alexander, Johnson, Massac, Pope, Pulaski, and Union; Kentucky - Ballard, Carlisle, Graves, Livingston, and Marshall.

JUSTIFICATION (continued):

Average annual benefits are as follows:

Annual Benefits	Amount
Navigation	\$ 526,253,300
Employment	837,000
Cost Reduction	27,333,400
Total	\$ 554,423,700

FISCAL YEAR 2002: The requested amount of \$34,000,000 for this project will be applied as follows:

Complete Washdown Barge	\$ 258,000
Continue Real Estate Activities	34,000
Continue Boat Ramp	600,000
Continue Lock Construction	1,400,000
Continue Approach Wall Construction	26,576,000
Continue Bulkhead Construction	1,000,000
Continue Mussel Monitoring	656,000
Initiate Gate Storage Facility	200,000
Planning, Engineering, and Design	844,000
Construction Management	2,432,000
Total	\$ 34,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50% of the total cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

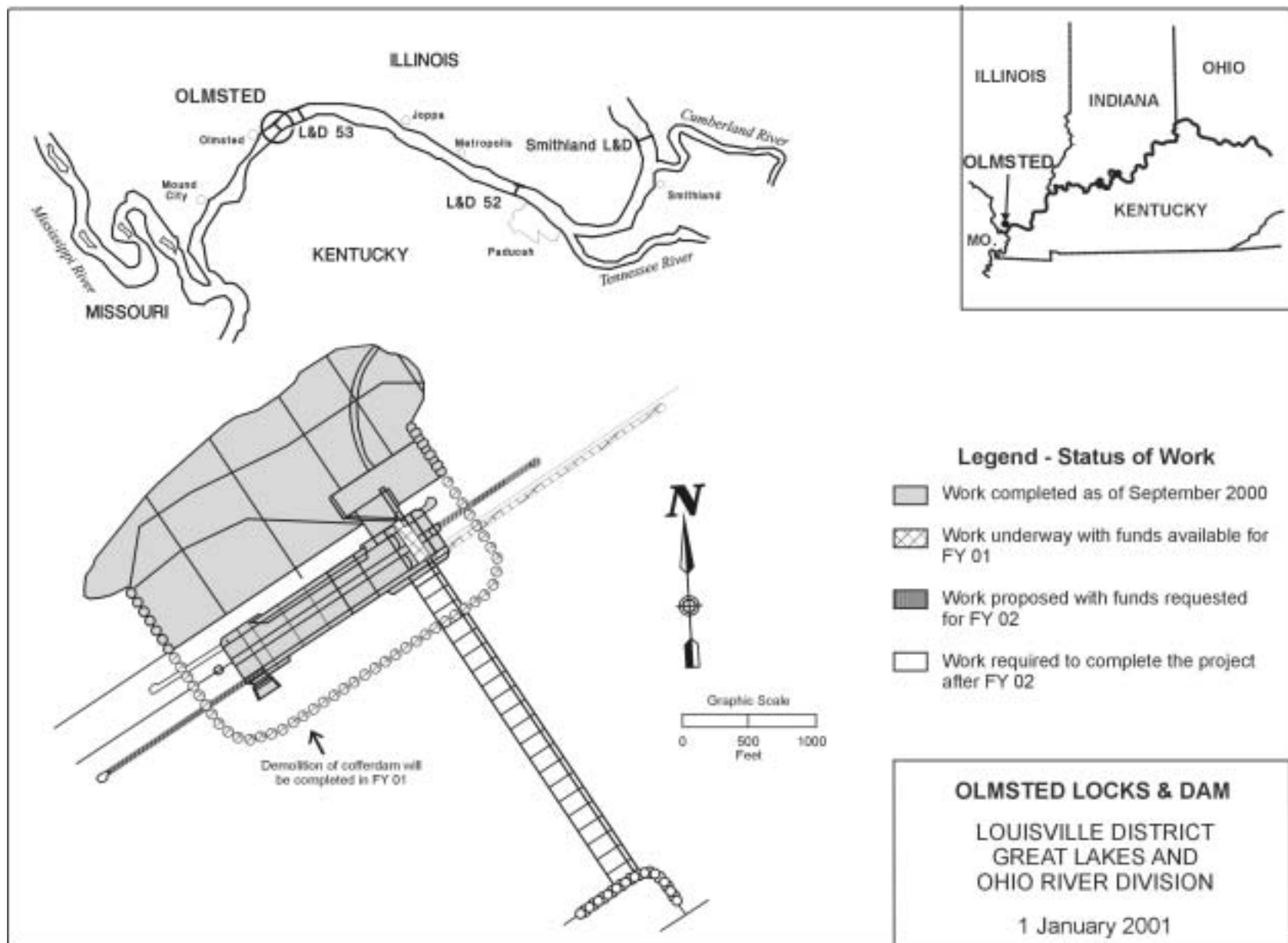
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$1,052,000,000 is a increase of \$52,000,000 from the latest estimate (\$1,000,000,000) presented to Congress (FY 2001). The change includes the following items.

Item	Amount
Price Escalation on Construction Features	\$ 52,000,000
Total	\$ 52,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency on April 4, 1986. Due to project changes, a Draft Supplemental EIS was filed in November 1991. The Final Supplement to the EIS was filed on March 26, 1993, and the Record Of Decision was signed on May 5, 1993.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986. Funds to initiate construction were appropriated in FY 1991.

The scheduled completion date has been changed from September 2010, the latest completion date presented to Congress (FY 2001), to Being Determined.



3 April 2001

APPROPRIATION TITLE: Construction, General – Channel and Harbor (Navigation)

PROJECT: Indiana Harbor and Canal, Confined Disposal Facility, Indiana (Continuing)

LOCATION: The project is located on the southwestern shore of Lake Michigan within the City of East Chicago, Lake County, Indiana, 4-1/2 miles east of the Indiana-Illinois state line and 17 miles from downtown Chicago, Illinois.

DESCRIPTION: Indiana Harbor and Canal (IHC) is an authorized Federal navigation project with an entrance channel and outer harbor protected by breakwaters, and an inner harbor which includes the Indiana Harbor Canal and its two branches, the Lake George Branch, which extends west for a distance of 6,800 feet, and the Calumet River Branch which extends south for about 2 miles where it joins the Grand Calumet River. A 4.8 million cubic yards capacity Confined Disposal Facility (CDF) will be constructed on the 164 acres of land adjacent to the Lake George Branch of the IHC, formerly occupied by an oil refinery owned by the Atlantic Richfield Company and subsequently acquired by Energy Cooperative Incorporated (ECI). The ECI property, which currently has open Resource Conservation and Recovery Act (RCRA) status, was transferred to the current local sponsor, the East Chicago Waterway Management District (ECWMD) in 1994. Use of this site for the CDF is contingent upon the construction of specific RCRA closure and corrective action features which will be integral aspects of the CDF construction. The elements of the CDF include construction of dikes; a hydraulic gradient control system which includes monitoring and extraction wells and a subsurface cutoff wall; an on-site effluent treatment plant; a rehandling area and air monitoring.

AUTHORIZATION: River and Harbor Acts of 1910 and 1960.

REMAINING BENEFIT - REMAINING COST RATIO: 2.1 to 1 at 7 3/8 percent.

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 7 3/8 percent.

INITIAL BENEFIT-COST RATIO: 2.1 to 1 at 7 3/8 percent. (FY 1999)

BASIS OF BENEFIT COST RATIO: Final Comprehensive Management Plan, Indiana Harbor and Canal Maintenance Dredging and Disposal Activities, dated January 1999 at October 1997 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT. OF EST FED. COST	STATUS: (1 JAN 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	\$ 69,000,000		Entire Project	0	Being Determined
Future Non-Federal Reimbursement	\$ 7,900,000				
Estimated Federal Cost (Ultimate)	\$ 61,100,000				
Estimated Non-Federal Cost	\$ 56,900,000				
Cash Contributions	47,400,000				
Other Costs	1,600,000				
Reimbursements	7,900,000				
Total Estimated Programmed Project Cost	\$ 118,000,000				
Total Estimated Unprogrammed Project Cost	0				
Total Estimated Project Cost	\$ 118,000,000				
Allocations to 30 September 2000	\$ 2,160,000				
Conference Allowance for FY 2001	3,291,000				
Allocation for FY 2001	2,758,000	1/			
Allocations through FY 2001	4,918,000	8			
Allocation Requested for FY 2002	5,000,000	16			
Programmed Balance to Complete After FY 2002	51,182,000				
Unprogrammed Balance to Complete after FY 2002	0				

1/ Reflects \$527,000 reduction assigned as savings and slippage and \$6,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: Indiana Harbor received over 15 million tons of waterborne commerce in 1990, second only to the Port of Chicago in tonnage received on Lake Michigan. The LTV Steel Company, Ispat Inland Steel Company, U.S. Gypsum Company, Safety-Kleen Company and the Amoco Oil Company are the primary users of the Indiana Harbor and Canal. LTV Steel Company and Ispat Inland Steel Company, the second and fourth largest steel manufacturers in the United States, respectively, are the largest users of the harbor.

Division: Great Lakes & Ohio River

District: Chicago

Indiana Harbor and Canal, Confined Disposal Facility, IN

3 April 2001

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JUSTIFICATION (continued):

There is an estimated 1 million cubic yards backlog of maintenance dredging at the Indiana Harbor and Canal. The resulting inadequate channel depths are causing deep-draft vessels to plow through sediments at various locations, pushing them into berthing areas and other areas located along dock faces outside of the Federal channel. In addition, ships come into the harbor loaded at less than optimum vessel drafts. There is also a problem due to restricted use of various docks and double handling of bulk commodities as a result of inadequate channel depths. These problems are currently causing increased transportation costs of waterborne commerce at this navigation project, presently estimated at \$12.4 million annually. These additional costs are estimated to increase to \$17.3 million by the year 2031. Ships trading into Indiana Harbor forfeit as much as 16 inches of draft, or more than 4,300 tons of cargo each arrival.

The Indiana Harbor and Canal navigation project and the Grand Calumet River region have been identified as one of the 43 Great Lakes Areas of Concern by the International Joint Commission primarily due to the quality of the watercourse sediments. Polluted sediments are continually put into suspension due to propeller action of commercial ships. Major storm events flush polluted sediments from the harbor into Lake Michigan. It is estimated that between 100,000 and 200,000 cubic yards of polluted sediment are being discharged from the harbor into the lake annually. The annual sediment load to the lake contains an estimated 67,000 pounds of chromium, 100,000 pounds of lead and 420 pounds of PCB's. Adverse impacts can be detected and measured for a distance of more than 5 miles from the harbor entrance, affecting water supply intakes, sport fishing and recreational areas. Dredging will remove approximately 4.8 million cubic yards of contaminated sediments from the ambient environment in Northwest Indiana and will partially mitigate the currently unrestricted migration of these polluted materials into the near shore areas of Lake Michigan.

The Indiana Harbor and Canal navigation project has not been dredged since 1972. The United States Environmental Protection Agency determined that disposal in Lake Michigan was no longer acceptable due to the polluted character of the dredged material, nor are they suitable for unconfined upland disposal or beneficial use. Therefore, a confined disposal facility must be constructed before maintenance dredging of the Federal channel can commence.

The total average annual benefits, all navigation, are \$14,333,000.

FISCAL YEAR 2002: The requested amount of \$5,000,000 will be applied as follows:

Initiate Dike, Cap, Rehandling Area, Well Construction	\$ 600,000
Continue Cutoff Wall Construction	3,400,000
Engineering & Design	600,000
Construction Management	400,000
Total	\$5,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Pay 25 percent of the costs allocated to general navigation facilities during construction.	\$ 23,000,000	
Reimburse an additional 10 percent of the costs of general navigation facilities allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, and relocations, allocated to general navigation facilities.	\$ 7,900,000	
Pay 100 percent of the construction costs allocated to the local service facilities (berthing areas) and 100 percent of operations and maintenance costs allocated to the local service facilities.	\$ 24,400,000	\$ 370,000
Provide lands, easements, rights of way, and borrow areas.	\$ 50,000	
Modify or relocate utilities, roads, bridges (except existing bridges over, Navigable waters) and other facilities, where necessary for the construction of the project.	\$ 1,550,000	
Total Non-Federal	\$56,900,000	\$370,000

The non-Federal sponsor has agreed to make all payments required concurrently with construction and to make all required reimbursements within a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: The East Chicago Waterway Management District is the local sponsor. The Project Cooperation Agreement was executed on 7 August 2000.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate (ultimate) of \$61,100,000 is the same as the last estimate presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Public and Agency review of final Environmental Impact Statement and the Comprehensive Management Plan were completed in November 1998. The Record of Decision for the FEIS for the entire project was signed February 2, 1999. The current non-Federal estimate of \$56,900,000 includes cash contribution of \$47,400,000. The non-Federal estimate is the same as noted in the PCA. The non-Federal sponsor is financially capable and willing to contribute the non-Federal share. The initiation of the non-Federal reimbursement will take place in FY 2006.

OTHER INFORMATION: Initial construction funds were appropriated in FY 1999.

The Comprehensive Management Plan, Indiana Harbor and Canal Maintenance Dredging and Disposal Activities, dated January 1999, was completed with Operation and Maintenance funds. The East Chicago Waterway Management District, the local project sponsor, has received letters of intent from the Ispat Inland Steel and LTV Steel companies to participate with the local sponsor as users of the confined disposal facility project.

The scheduled completion date has been changed from September 2035, the latest completion date presented to Congress (FY 2001), to Being Determined.

APPROPRIATION TITLE: Construction General - Locks & Dams (Navigation)

PROJECT: Kentucky Lock and Dam, Tennessee River, Kentucky (Continuing)

LOCATION: The project is located on the Tennessee River at Mile 22.4 near Grand Rivers, Kentucky.

DESCRIPTION: The modernization of the existing facility will include the addition of a 110-foot x 1200-foot lock landward and adjacent to the existing 110-foot x 600-foot lock, and the relocation of an existing railroad, highway, and powerhouse access road. The railroad and highway will be relocated downstream of the new lock's lower gates and will require the construction of new bridges across the river. The powerhouse access road will be relocated from the east bank to the west bank and will require the construction of a new ramp.

AUTHORIZATION: The Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 2.4 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 2.4 at 7 5/8 percent.

INITIAL BENEFIT-COST RATIO: 2.4 at 7 5/8 percent. (FY 1998)

BASIS OF BENEFIT COST RATIO: Benefits are based on the Limited Reevaluation Report approved in November 1995 and costs are based on the Innovated Design/Cost Reduction Studies completed in June 1995.

SUMMARIZED FINANCIAL DATA

		STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$533,000,000			
Construction General	\$266,500,000			
Inland Waterways Trust Fund	\$266,500,000	Entire Project	8	Being Determined
Total Estimated Project Cost	\$533,000,000			

PHYSICAL DATA

Lock Chamber (New)	110 ft. x 1200 ft.
Bridges	
Railroad (New)	3100 ft.
Highway (New)	3100 ft.

Division: Great Lakes & Ohio River

District: Nashville

Kentucky Lock and Dam, Tennessee River, KY

3 April 2001

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SUMMARIZED FINANCIAL DATA (Continued)

	CONSTRUCTION GENERAL	INLAND WATERWAYS TRUST FUND	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2000	22,458,000	22,458,000	8
Conference Allowance for FY 2001	15,000,000	15,000,000	
Allocation for FY 2001	12,571,000 <u>1/</u>	12,571,000 <u>2/</u>	
Allocations through FY 2001	35,029,000	35,029,000	13
Allocation Requested for FY 2002	7,200,000	7,200,000	
Programmed Balance to Complete after FY 2002	224,271,000	224,271,000	
Unprogrammed Balance to Complete after FY 2002	0	0	

1/ Reflects \$2,400,000 reduction assigned as savings and slippage, and \$29,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

2/ Reflects \$2,400,000 reduction assigned as savings and slippage, and \$29,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: The existing 110-foot x 600-foot Kentucky Lock is too small to handle a modern 15-barge tow without two lockages. This greatly increases the processing time resulting in Kentucky Lock having one of the highest transit times on the inland waterway system. Delays at the lock averaged 4 hours per tow in 2000. System traffic is expected to grow annually from the 38 million tons recorded in 2000 to an estimated 77 million tons in 2050 resulting in a 38.4 hour average delay per tow. The addition of a new 1,200-foot lock will greatly reduce these delays and generate \$55.1 million in average annual benefits to the nation as a result of reduced cost to transport commodities through the system.

FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Planning, Engineering, and Design	\$9,345,000
Continue Construction Activities	4,725,000
Continue Construction Management	330,000
Total	\$14,400,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost for the project will be derived from the Inland Waterways Trust Fund.

Division: Great Lakes & Ohio River

District: Nashville

Kentucky Lock and Dam, Tennessee River, KY

3 April 2001

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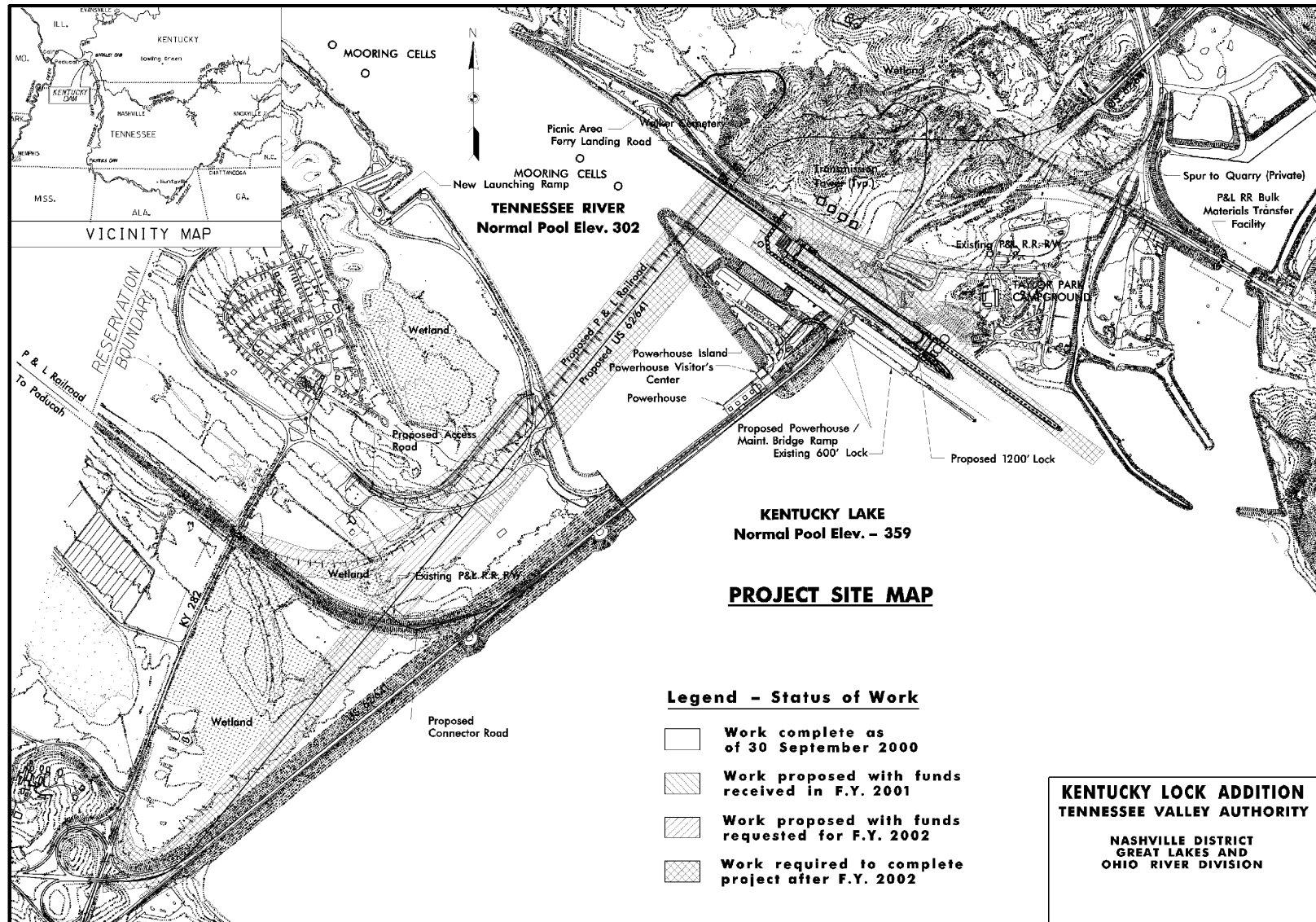
STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$533,000,000 is the same as the last estimate presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Impact Statement was included in the Final Feasibility Report and the Record of Decision was signed on 26 March 1998. An Environmental Assessment has been prepared to address relocating the highway to an alignment below the lock and dam instead of across the dam. A supplemental Environmental Impact Statement to address the proposed changes and design refinements identified subsequent to the original report and Environmental Impact Statement will be completed in 2001.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1993. Funds to initiate construction were appropriated in FY 1998.

The scheduled completion date has been changed from September 2011, the latest completion date presented to Congress (FY 2001), to Being Determined.



3 April 2001

PROJECT: McAlpine Locks and Dams, Kentucky and Indiana (Continuing)

LOCATION: The project is located on the Ohio River at Louisville, Jefferson County, Kentucky, Ohio River mile 604.0 to 608.0.

DESCRIPTION: The modernization of the existing facility will replace a 600-foot auxiliary lock chamber and an inactive 360-foot 2-stage chamber with a 1,200-foot lock on the Kentucky bank side of the existing lock and dam. This effort will result in twin 1,200-foot locks for tow traffic. Construction of a new bridge is required to continue access to Shippingport Island and the Louisville Gas & Electric hydroelectric power facility.

AUTHORIZATION: The Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 8 percent.

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT COST RATIO: Benefits are based on the General Design Memorandum, Project Economic Update approved in March, 1994, at 1994 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$278,000,000	Entire Project	19	Being Determined
General Appropriations	139,000,000				
Inland Waterways Trust Fund	139,000,000				
			PHYSICAL DATA		
Estimated Non-Federal Cost		0	Fixed Bridge		2,100 ft.
			Lock Chamber (New)		110 by 1,200 ft.
Total Estimated Project Cost		\$278,000,000	Buildings:		
			Resident Engineer		6,100 SF
			Operations Service		2,300 SF
			Storage		5,100 SF

Division: Great Lakes & Ohio River

District: Louisville

McAlpine Locks and Dams, KY and IN

3 April 2001

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SUMMARIZED FINANCIAL DATA (Continued)	GENERAL APPNS	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2000	\$ 18,116,000	\$ 18,116,000	
Conference Allowance for FY 2001	9,000,000	9,000,000	
Allocation for FY 2001	12,042,000 <u>1/</u>	12,042,000 <u>1/</u>	
Allocations through FY 2001	30,158,000	30,158,000	22
Allocation Requested for FY 2002	6,816,000	6,816,000	27
Programmed Balance to Complete after FY 2002	102,026,000	102,026,000	100
Unprogrammed Balance to Complete after FY 2002	0	0	

1/ Reflects \$1,440,000 reduction assigned as savings and slippage, \$4,500,000 reprogrammed to the project, and \$18,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: The existing navigation locks are on the Kentucky side of the river. They consist of a 110 by 1,200 foot main lock that was placed in operation in 1961 and two auxiliary locks that were completed in 1930 (110 by 600 foot) and 1921 (56 by 360 foot, closed since 1971). The modernization of the existing facility would replace the existing auxiliary locks with a new 110 by 1,200 foot lock. The new lock is in response to identified annual increases in tonnage levels and delays. Tonnages through the McAlpine Locks are expected to grow annually from the 1993 figure of 63.2 million tons to 127 million tons in 2060. About 55 percent of current traffic is coal. Currently, the average delay is 0.8 hours per tow. With the existing project, by the year 2060, the average delay is projected to be 40 hours per tow. With the lock addition, the average delay is projected to be 1.5 hours per tow. Other project components include a fixed bridge spanning 2,100 feet, including 840 feet of embankment, and three one-story buildings for offices, service, and storage.

Average annual benefits are as follows:

Annual Benefits	Amount
Navigation from Reduced Delays	\$41,621,800
Total	\$41,621,800

FISCAL YEAR 2002: The requested amount will be applied as follows:

Continuing Cofferdam Construction	\$ 11,392,000
Planning, Engineering, and Design	1,200,000
Construction Management	1,000,000
Real Estate Admin	40,000
Total	\$ 13,632,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

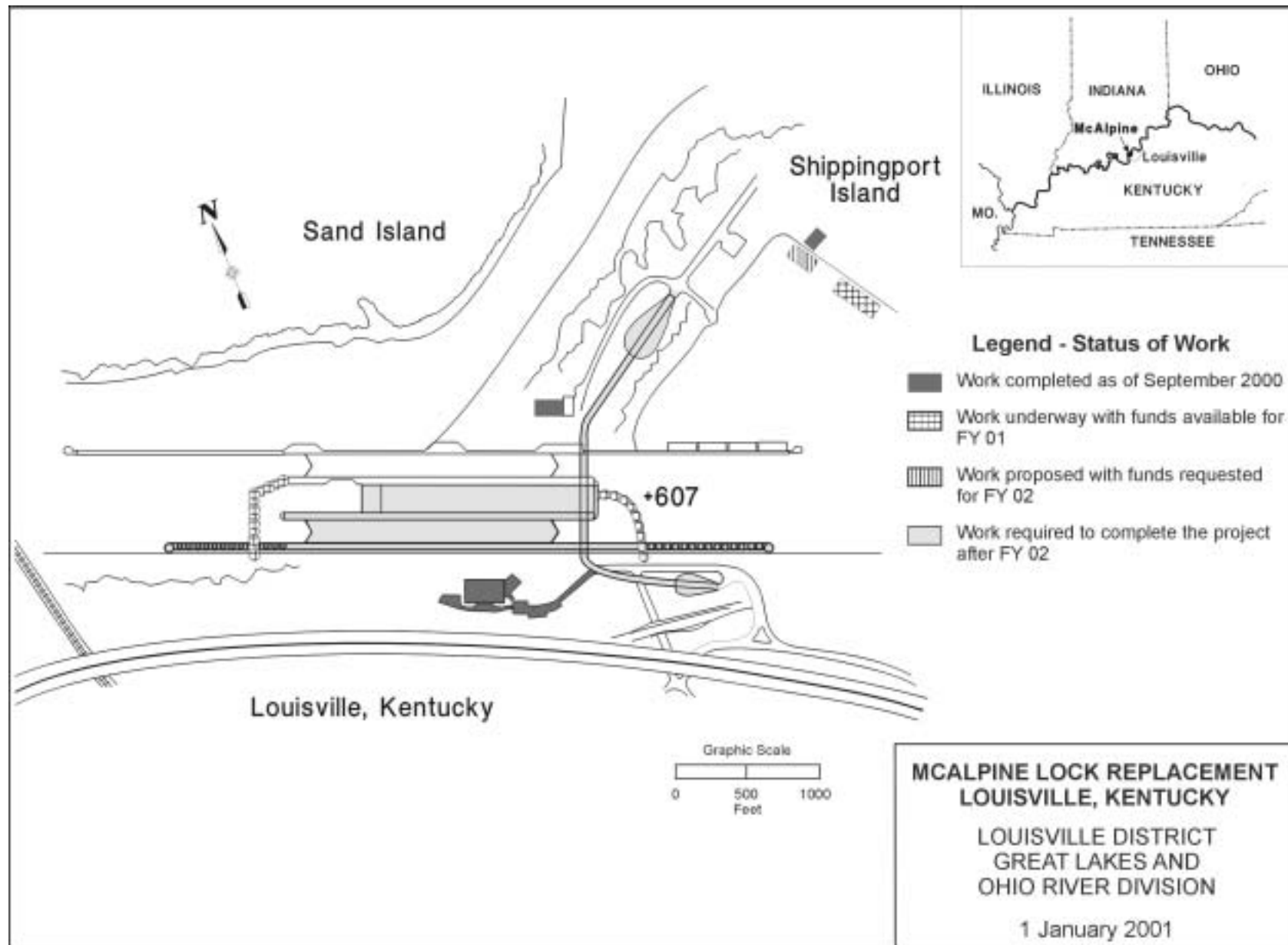
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$278,000,000 is an increase of \$10,000,000 from the latest estimate (\$268,000,000) presented to Congress (FY 2001). The change includes the following item:

Item	Amount
Price Escalation on Construction Features	\$ 10,000,000
Total	\$10,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) and a Finding of No Significant Impacts (FONSI) have been signed and included in the Final Feasibility Report. In addition, a Section 404 (b) (1) Evaluation has been completed and 401 Water Quality Certification will be obtained from the Kentucky Division of Water. The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency in August, 1990. A supplemental EIS updating project requirements was completed in FY 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1990. Funds to initiate construction were appropriated in FY 1996.

The scheduled physical completion date has changed from September 2008, the date last submitted to Congress (FY2001), to Being Determined.



3 April 2001

APPROPRIATION TITLE: Construction General - Locks and Dams (Navigation)

PROJECT: Locks and Dams 2, 3 and 4, Monongahela River, Pennsylvania (Continuing)

LOCATION: Existing Locks and Dams 2, 3, and 4 are the last of the old and undersized locks on the Monongahela River system and have components which have been in service for nearly 100 years. The three projects are located on the lower portion of the Monongahela River near the city of Pittsburgh, Pennsylvania and are located in Allegheny, Washington and Westmoreland Counties. Measured from the Point in Pittsburgh, Locks and Dam 2 is located at river mile 11.2, Locks and Dam 3 at river mile 23.8, and Locks and Dam 4 at river mile 41.5. Six other navigation projects situated upstream of Locks and Dam 4 provide a navigable waterway to Fairmont, West Virginia. At the Point in Pittsburgh, the Monongahela River joins with the Allegheny River to form the Ohio River.

DESCRIPTION: Existing Locks and Dam 2 consists of a main lock with chamber dimensions of 110 by 720 feet, an auxiliary lock with chamber dimensions of 56 by 360 feet, and a 748-foot fixed-crest dam. Existing Locks and Dam 3 consists of locks with chamber dimensions of 56 by 720 feet and 56 by 360 feet and a 670-foot fixed-crest dam. Existing Locks and Dam 4 consists of locks with chamber dimensions of 56 by 720 feet and 56 by 360 feet and a gated dam consisting of five 84-foot gated sections and a 43-foot fixed weir section. The authorized projects consist of a new gated dam and a rehabilitated auxiliary chamber floodway bulkhead structure at Locks and Dam 2; new twin 84 by 720 foot locks and below-dam scour protection of Locks and Dam 4; raising pool 2 by 5 feet and lowering pool 3 by 3.2 feet; removal of Locks and Dam 3; and associated channel dredging, relocations and bank stabilization. Construction began in FY 1995 with the upgrade of the Locks 2 auxiliary chamber floodway bulkhead and relocations. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1992.

REMAINING BENEFIT - REMAINING COST RATIO: 3.5 to 1 at 8 1/4 percent.

TOTAL BENEFIT - COST RATIO: 3.6 to 1 at 8 1/4 percent.

INITIAL BENEFIT-COST RATIO: 3.6 to 1 at 8 1/4 percent (FY 1995).

BASIS OF BENEFIT - COST RATIO: Benefits are from an economic update completed in May 1994.

Division: Great Lakes & Ohio River

District: Pittsburgh

Locks and Dams 2, 3 and 4, Monongahela River, PA

3 April 2001

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SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 705,000,000	Entire Project	28	Being determined
General Appropriations	\$ 352,500,000				
Inland Waterway Trust Fund	\$ 352,500,000				
Estimated Non-Federal Cost	0				
Total Estimated Project Cost		\$ 705,000,000			

	GENERAL APPNS.	INLAND WATERWAYS TRUST FUND	ACCUM. PCT.OF EST. FED.COST
Allocations to 30 September 2000	\$ 60,220,000	\$ 60,220,000	
Conference Allowance for FY 2001	\$ 30,000,000	\$ 30,000,000	
Allocation for FY 2001	\$ 32,441,000 <u>1/</u>	\$ 32,441,000 <u>2/</u>	
Allocation thru FY 2001	\$ 92,661,000	\$ 92,661,000	26
Allocation Requested for FY 2002	\$ 17,235,000	\$ 17,235,000	31
Programmed Balance to Complete after FY 2002	\$ 242,604,000	\$ 242,604,000	
Unprogrammed Balance to Complete after FY 2002	0	0	

1/ Reflects a reduction of \$4,800,000 assigned as savings and slippage, \$59,000 rescinded in accordance with Consolidated Appropriations Act, 2001 and an increase of \$7,300,000 reprogrammed to the project.

2/ Reflects a reduction of \$4,800,000 assigned as savings and slippage, \$59,000 rescinded in accordance with Consolidated Appropriations Act, 2001 and an increase of \$7,300,000 reprogrammed to the project.

Division: Great Lakes & Ohio River

District: Pittsburgh

Locks and Dams 2, 3 and 4, Monongahela River, PA

3 April 2001

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PHYSICAL DATA

Locks and Dams 2 and 3:

- New gated dam 2
- Rehabilitated Auxiliary Chamber Floodway L&D 2
- Bulkhead Structure L&D 2
- Remove Locks and Dam 3
- Raise pool 2 by 5 feet and lower pool 3 by 3.2 feet

Locks and Dam 4:

- New twin 84 by 720 foot locks
- Scour Protection

JUSTIFICATION: The projects are located on the Monongahela River near Pittsburgh. The major problems with the projects are deteriorated structural condition and limited lock capacity. These problems are expected to become increasingly severe as the projects age. The extreme structural deterioration of Dam 2 and Locks and Dam 3 is of paramount concern. Major repairs and rehabilitation will not prevent structural failure. The probability of major structural failure and catastrophic loss of navigation pools is unacceptable. The completion of the new gated Braddock Dam, now under construction at Locks and Dam 2, together with completion of the Pool 2 relocations and raising of Pool 2, will provide significant risk mitigation while the balance of the authorized plan is under design and construction. The continued viability of the Lower Monongahela River navigation system is vital to southwestern Pennsylvania and northeastern West Virginia. For example, CONSOL Energy's Alicia Dock, located along the Monongahela River near Brownsville, PA., is a new transshipment facility with the capacity to throughput 6 million tons of coal annually. Coal is transferred from rail cars directly onto river barges, or can be stored on site up to 200,000 tons capacity. This facility will benefit from the improved reliability and efficiency to be provided by the projects.

Average annual benefits are as follows:

Annual Benefits	Amount
Commercial Navigation (Shallow Draft Locks)	\$ 298,000,000
Replacement of Shoreside Utilities	\$ 2,000,000
Total	\$300,000,000

Division: Great Lakes & Ohio River

District: Pittsburgh

Locks and Dams 2, 3 and 4, Monongahela River, PA

3 April 2001

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FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Real Estate Acquisition	\$ 100,000
Continue Leetsdale Archaeology	\$4,000,000
Continue Municipal Relocations	5,000,000
Continue Planning, Engineering and Design	5,000,000
Continue Construction	19,370,000
Continue Construction Management	1,000,000
Total	\$ 34,470,000

NON-FEDERAL COSTS: In accordance with the cost-sharing and financing concepts reflected in the Water Resource Development Act of 1986, 50% of the total cost of construction will be derived from the Inland Waterways Trust Fund.

Construction of the projects will require modification to privately owned shoreside facilities and submarine utility crossings, which were all constructed under Department of the Army permits pursuant to Section 10 of the Rivers and Harbors Act, approved March 3, 1899. The estimated cost to owners of adapting these facilities to new project conditions is \$111,000,000.

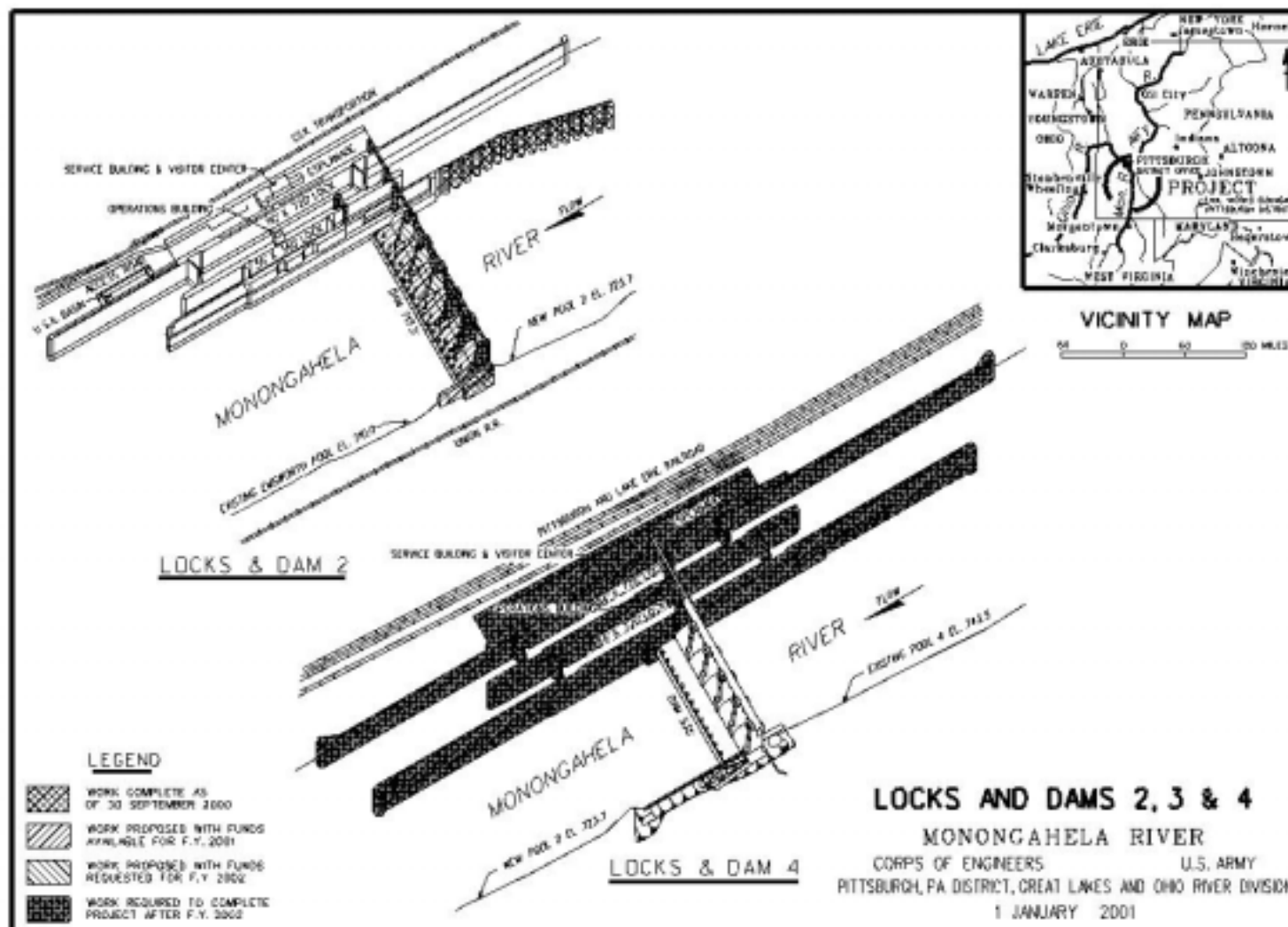
STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$705,000,000 is the same as the last estimate presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on January 28, 1992. The Record of Decision was signed by the Director of Civil Works on December 17, 1992. A Supplemental Environmental Impact Statement on Project Disposal and various other Environmental Assessments, all resulting in Finding of No Significant Impacts have been completed pursuant to NEPA.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1992. Funds to initiate construction were appropriated in FY 1995.

The scheduled completion date has changed from September 2010, the latest completion date presented to Congress (FY 2001), to Being Determined.



3 April 2001

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APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Marmet Locks and Dam, West Virginia (Continuing)

LOCATION: Marmet Locks and Dam is located in Kanawha County near Belle, West Virginia, on the Kanawha River approximately 68 miles above its confluence with the Ohio River. The pool is located entirely in West Virginia.

DESCRIPTION: The proposed modernization plan includes the construction of an additional 110 foot by 800 foot lock on the right descending bank landward of the existing locks. The plan includes the continued use of both existing 56 foot by 360 foot lock chambers as auxiliary locks. The existing dam and the hydroelectric power plant will also remain in operation. A total of 216 additional real estate tracts will be required to support the project. Of the 216 tracts, 179 are residential, 9 are commercial and 28 are vacant. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 4.0 to 1 at 7 5/8 percent interest rate.

TOTAL BENEFIT-COST RATIO: 2.9 to 1 at 7 5/8 percent interest rate.

INITIAL BENEFIT-COST RATIO: 3.3 to 1 at 7 5/8 percent interest rate (FY 1998).

BASIS OF BENEFIT-COST RATIO: Benefits are from an Economic Update dated June 1996 and at October 1995 price levels.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$313,000,000	Entire Project	15	Being Determined
Construction General	156,500,000			
Inland Waterways Trust Fund	156,500,000			
Total Estimated Project Cost	\$313,000,000			

Division: Great Lakes & Ohio River

District: Huntington

Marmet Locks and Dam, WV

3 April 2001

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SUMMARIZED FINANCIAL DATA (Continued)

	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2000	\$ 16,404,000	\$ 16,406,000	
Conference Allowance for FY 2001	5,100,000	5,100,000	
Allocation for FY 2001	6,775,000 1/	6,773,000 2/	
Allocations through FY 2001	23,179,000	23,179,000	15
Allocation Requested for FY 2002	3,100,000	3,100,000	17
Programmed Balance to Complete after FY 2002	130,221,000	130,221,000	
Unprogrammed Balance to Complete after FY 2002	0	0	

1/ Reflects \$816,000 reduction assigned as savings and slippage, \$2,501,000 reprogrammed to the project, and \$10,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

2/ Reflects \$816,000 reduction assigned as savings and slippage, \$2,499,000 reprogrammed to the project, and \$10,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

PHYSICAL DATA

Lock:

Number – 3
Existing Chambers - 2 - 56 ft. x 360 ft.
Additional Chamber - 1 - 110 ft. x 800 ft.
Lift - 24 ft.

Lands and Damages:

Acres - 21, Existing Locks and Dam
- 103, New Lock
- 26, Temporary Work Area
Structures - 242 Residences
- 10 Businesses

JUSTIFICATION: Marmet Locks and Dam links the Kanawha Valley, an important chemical and coal producing area, to its product markets and supply areas. During 2000, 16.5 million tons of traffic locked through Marmet. Coal is the major commodity shipped on the Kanawha River, accounting for approximately 94 percent of the total tonnage. The Marmet project presents a significant impediment to the efficient flow of waterborne commerce due to its outdated features. To compound the effect on flow efficiency, Marmet traffic demand is projected to increase to 35 million tons by 2050. It is also projected that the traffic demand will increase to about 20 million tons, the current maximum lock capacity without switch boats, by the year 2005. Amendments to the Clean Air Act, passed in November 1990, have caused an increase in demand for the Kanawha River Basin's low-sulphur coal. When the new Winfield Lock came on line in November 1997, the industry's helper boats relocated from Winfield to Marmet. Lockages at Marmet immediately increased 30% to 50% in magnitude. The congestion is expected to increase as traffic on the river increases.

Average Annual Benefits	Amount
Commercial Navigation	\$ 55,943,000
Total	55,943,000

FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Land Acquisition (including hardships)	\$ 3,200,000
Complete Buildings, Grounds, Utilities Construction	1,000,000
Continue Cultural Resources	500,000
Planning, Engineering and Design	1,420,000
Supervision and Administration	80,000
Total	\$ 6,200,000

NON-FEDERAL COST: In accordance with the cost sharing and financing contained in the Water Resources Development Act of 1986, 50 percent of the total costs of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$313,000,000 is unchanged from the latest estimate (\$313,000,000) presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with the Environmental Protection Agency (EPA) on January 26, 1994.

Division: Great Lakes & Ohio River

District: Huntington

Marmet Locks and Dam, WV

3 April 2001

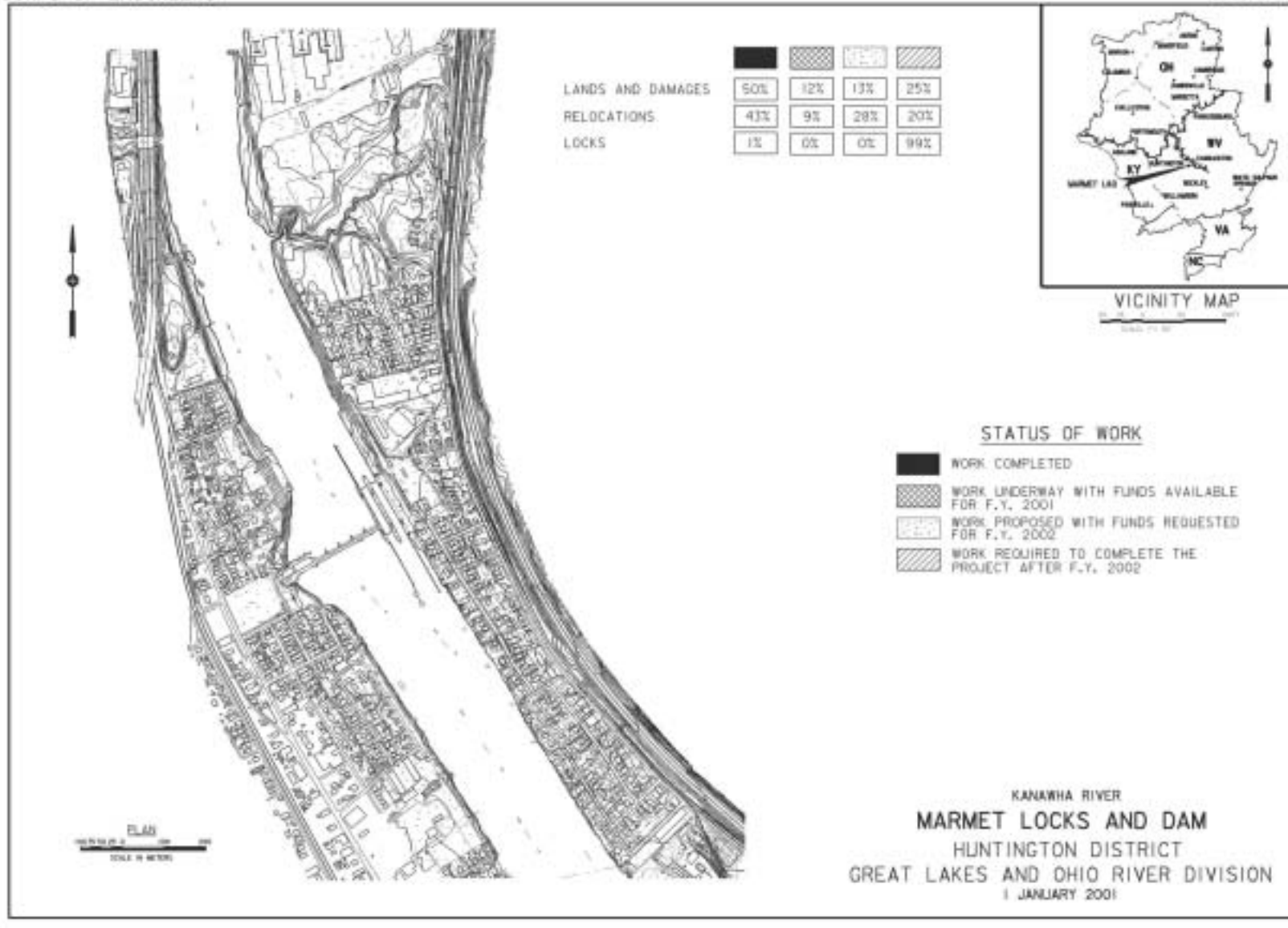
60

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1994. Funds to initiate construction were appropriated in FY 1998.

Environmental Site Assessments (Phase I and II) identified soil contamination at levels sufficient to warrant remedial activity. None of the contamination identified is considered hazardous; rather, it is a non-hazardous contaminant which requires that the soil be disposed of in a landfill in conformance with Subtitle D of the Resource Conservation and Recovery Act (RCRA). No groundwater contamination was found.

The District has developed plans for the new lock construction to have minimum interference with river traffic during construction, but some interference is expected. The District had established dialogue with the towing industry to determine the best methods to use to minimize interference.

The scheduled physical completion date has changed from September 2009, the date last submitted to Congress (FY2001), to Being Determined



APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Robert C. Byrd Locks and Dam (formerly Gallipolis Locks and Dam), West Virginia and Ohio (Continuing)

LOCATION: The project is situated in the Middle Ohio Valley at Ohio River mile 279.2, approximately 14 miles downstream from the mouth of the Kanawha River in West Virginia and approximately 30 miles upstream from the City of Huntington, West Virginia. The new locks are in Mason County, West Virginia and the abutment of the dam is in Gallia County, Ohio.

DESCRIPTION: The project includes the rehabilitation of the non-navigable, high-lift, gated, existing dam and construction of a new 1200 by 110 foot main lock and a new 600 by 110 foot auxiliary lock in a canal extending across a slight bend in the river, bypassing the existing locks and dam on the left descending (West Virginia) bank. The canal, in effect, straightens the river bend and provides a relatively straight down-bound approach for several miles. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1935, Supplemental Appropriations Act, 1985, and the Water Resources Development Act of 1986. The Water Resources Development Act of 1992, Section 118, changed the project name to the Robert C. Byrd Locks and Dam. The Water Resources Development Act of 2000, Section 548, added authorization to preserve and restore the General Jenkins House at Lesage/Greenbottom Swamp.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because construction of the project is substantially complete.

TOTAL BENEFIT-COST RATIO: Not applicable because construction of the project is substantially complete.

INITIAL BENEFIT-COST RATIO: 11.3 to 1 at 8 1/8 percent (FY 1985).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Design Memorandum, dated November, 1982, at October, 1982 price levels.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
New Construction Work		Entire Project	96	Being Determined
Estimated Federal Cost	\$ 308,000,000	Lock Construction	100	Jan 1993
General Appropriations	154,000,000	Mitigation Sites	85	Being Determined
Inland Waterways Trust Fund	154,000,000	Dam Rehabilitation	97	Being Determined

Division: Great Lakes & Ohio River

District: Huntington

Robert C. Byrd Locks and Dam, WV and OH

3 April 2001

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SUMMARIZED FINANCIAL DATA (Continued)

Dam Rehabilitation		
Estimated Federal Cost		\$ 71,000,000
General Appropriations	35,500,000	
Inland Waterways Trust Fund	35,500,000	
Total Estimated Federal Cost		\$ 379,000,000
General Appropriations	189,500,000	
Inland Waterways Trust Fund	189,500,000	
Estimated Non-Federal Cost		0
Total Estimated Project Cost		\$ 379,000,000

	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2000	\$184,210,000 <u>1/</u>	\$184,210,000	
Conference Allowance for FY 2001	1,350,000	1,350,000	
Allocation for FY 2001	1,698,000 <u>2/</u>	1,698,000 <u>3/</u>	
Allocations through FY 2001	185,908,000	185,908,000	98
Allocation Requested for FY 2002	650,000	650,000	98
Programmed Balance to Complete after FY 2002	2,942,000	2,942,000	
Unprogrammed Balance to Complete after FY 2002	0	0	

1/ Allocation thru FY 00 includes \$9,526,000 paid by Department of Treasury Judgment Fund for settled claim.

2/ Reflects \$216,000 reduction assigned as savings and slippage, \$567,000 reprogrammed to the project, and \$3,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

3/ Reflects \$216,000 reduction assigned as savings and slippage, \$567,000 reprogrammed to the project, and \$3,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

PHYSICAL DATA

Bypass Canal:

Length - 1.7 miles
Bottom Width - 500 feet (min)

Locks:

Number - 2
Main Lock - 110 x 1,200 feet
Auxiliary Lock - 110 x 600 feet

Dam:

Major rehabilitation of the existing navigation dam to include replacing the dam roller gates and strengthening the foundation.

Lands and Damages:

Total existing easement area	1798 acres
Existing locks and dam	82 acres
New locks and canal	546 acres
Mitigation	837 acres
Dam rehabilitation	28 acres

(Note: No residential structures are located in the affected area.)

JUSTIFICATION: Completion of the new locks has enabled tows to transit the project area efficiently and has completed a series of 110 by 1200 foot locks from near Pittsburgh to Cairo, Illinois. Reduced delays and transportation costs are benefiting the economy of the Nation directly and indirectly. The project is strategically located between the highly industrialized upper Ohio River Basin area and its product markets and supply regions. Robert C. Byrd Locks and Dam captures a significant portion of the commodities transiting the Ohio River. The traffic levels (number of lockages) have decreased and volume of commodities have increased at Robert C. Byrd Locks and Dam, as forecast in the authorization document. Between the years of 1993 and 2000, traffic has ranged from 51.2 to 59.4M tons annually. Commodity traffic projections reflect 75.9 million tons transiting the project in 2020.

The new locks and the dam rehabilitation also remedy problems associated with the age, condition, and hazardous location of the existing facilities. The existing locks and dam are over 50 years old and have been increasingly difficult to operate and maintain. Lock outages have been a major problem and would have become very critical in the future. Accident reports and information from the navigation industry documented that the existing facilities were unsafe due to the location of the locks and velocities generated during above normal river conditions.

Average annual benefits for the project are estimated as follows:

Annual Benefits	Amount
Navigation	\$161,178,000
Recreation	140,000
Total	\$161,318,000

FISCAL YEAR 2002: The requested amount will be applied as follows:

	New Construction	Major Rehabilitation
Complete Onsite Mitigation	\$ 125,000	
Initiate Painting of Bridge over Dam		\$ 500,000
Planning, Engineering and Design	253,000	213,000
Construction Management	64,000	145,000
Total	\$ 442,000	\$ 858,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total costs of construction will be derived from Inland Waterways Trust Fund. The West Virginia Division of Natural Resources will be responsible for operation and management of mitigation lands at an estimated average annual cost of \$55,000 for the Greenbottom area and \$345,000 for the on-site mitigation (fish hatchery). The West Virginia Division of Culture and History annual O&M cost for the General Jenkins House is estimated to be \$30,000.

STATUS OF LOCAL COOPERATION: The West Virginia Division of Natural Resources by lease agreement has assumed responsibility for operation and management of the off-site mitigation area. The General Jenkins House has been subleased to the West Virginia Division of Culture and History. The Corps is in the process of turning the completed onsite mitigation fish hatchery over to the State of West Virginia Division of Natural Resources.

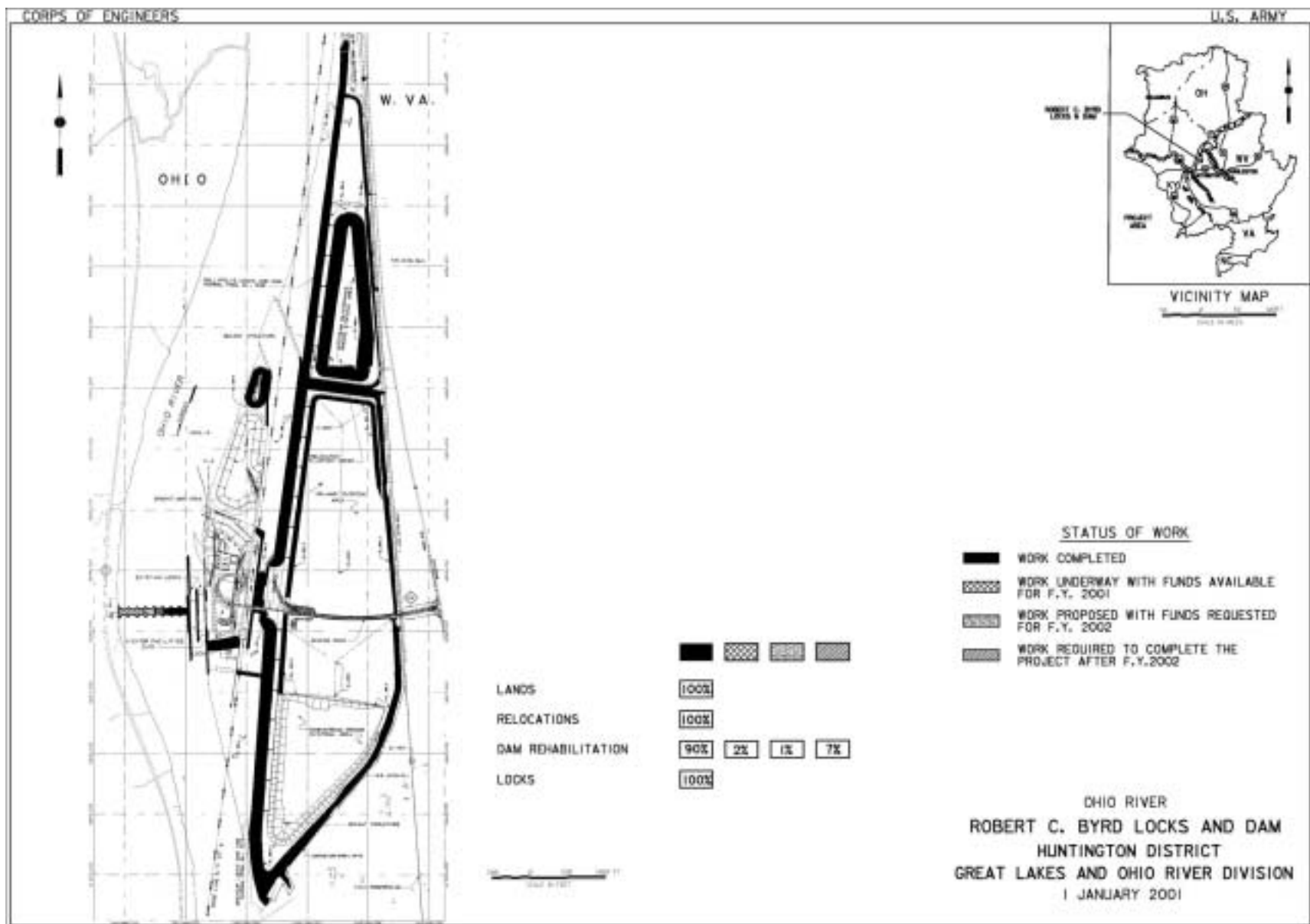
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$379,000,000 is unchanged from the latest estimate (\$379,000,000) presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (EIS) was filed with Environmental Protection Agency on January 8, 1981. Supplement I to the EIS was filed on October 30, 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1984. Funds to initiate construction were appropriated in FY 1985. The Water Resources Development Act (WRDA) of 1992, Section 118, changed the project name to the Robert C. Byrd Locks and Dam.

The Water Resources Development Act of 2000, Section 548, includes authority to preserve and restore the General Jenkins House, which is located at the Greenbottom Wildlife Management Area. The Corps will work with the West Virginia Division of Culture and History and interested local historical groups to develop a strategy to implement the provisions of WRDA 2000.

The scheduled physical completion date has changed from September 2004, the date last submitted to Congress (FY2001), to Being Determined



3 April 2001

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Winfield Locks and Dam, West Virginia (Continuing)

LOCATION: Winfield Locks and Dam is located in Putnam County, West Virginia, on the Kanawha River near Eleanor, approximately 31 miles above the confluence with the Ohio River. The pool is located entirely in West Virginia.

DESCRIPTION: The modernization plan includes the construction of an additional 110 by 800 foot lock on the right descending bank landward of the existing locks and a 110-foot wide non-navigable gate bay between the old lock and the new lock. The new lock will be skewed six degrees landward (upstream to downstream) from the existing locks. The plan includes the continued use of both existing 56 by 360 foot lock chambers as auxiliary locks. The existing dam also will remain in use. All work is programmed.

AUTHORIZATION: The Supplemental Appropriations Act, 1985 for engineering and design and land acquisition, and the Water Resources Development Act of 1986 for construction.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because the project is substantially complete.

TOTAL BENEFIT-COST RATIO: Not applicable because the project is substantially complete.

INITIAL BENEFIT-COST RATIO: 6.2 to 1 at 8 5/8 percent (FY 1987).

BASIS OF BENEFIT-COST RATIO: Benefits are from Design Memorandum No. 1, General Design Memorandum, dated April, 1988.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$235,500,000	Entire Project	98	Being Determined
General Appropriations	\$117,750,000	Locks Operational	100	Nov 1997
Inland Waterways Trust Fund	117,750,000			
Estimated Non-Federal Cost	0			
Total Estimated Project Cost	\$235,500,000			

Division: Great Lakes & Ohio River

District: Huntington

Winfield Locks and Dam, WV

3 April 2001

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SUMMARIZED FINANCIAL DATA (Continued)

	GENERAL APPNS.	INLAND WATERWAYS TRUST FUND	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2000	\$113,651,000	\$113,651,000	
Conference Allowance for FY 2001	150,000	150,000	
Allocation for FY 2001	21,000 <u>1/</u>	21,000 <u>2/</u>	
Allocations through FY 2001	113,672,000	113,672,000	97
Allocation Requested for FY 2002	300,000	300,000	97
Programmed Balance to Complete after FY 2002	3,778,000	3,778,000	
Unprogrammed Balance to Complete after FY 2002	0	0	

1/ Reflects \$24,000 reduction assigned as savings and slippage, and \$105,000 reprogrammed from the project.

2/ Reflects \$24,000 reduction assigned as savings and slippage, and \$105,000 reprogrammed from the project.

PHYSICAL DATA

Lock:	Lands and Damages:
Number - 1	Acres - 1,243 easement
Chamber - 110 by 800 ft.	- 41 for existing Locks and Dam
Lift - 28 ft.	- 316 for new Lock
	New Lock Site:
	Mobile home park (37 units), two active industries, and one inactive industry.

JUSTIFICATION: Winfield Locks and Dam links the Kanawha Valley, an important chemical and coal producing area, to its product markets and supply areas. Up-bound traffic through Winfield is composed of important supplies of chemicals, feedstocks, aggregates, and petroleum fuels. Down-bound traffic is composed largely of coal produced in the upper Kanawha River Basin and destined for electric generating facilities and coking plants throughout the middle and upper Ohio River Basin. The average annual tonnage from 1990-99 was 21.6 million tons. During 1998, 21.3 million tons of traffic locked through Winfield. Coal accounts for approximately 76 percent of the total tonnage.

The Winfield project presented a significant impediment to the efficient flow of waterborne commerce due to its outdated features. Before the new chamber came on-line in November 1997, only 30 percent of the barges processed at Winfield were the size that the project originally was designed to serve and only two percent

JUSTIFICATION: (Continued)

of the tows were small enough to be locked in a single operation. The average delay per tow was 4.0 hours in 1996 with an average of over 4 lockages per tow. The total processing time (lockage plus delay time) was 6.7 hours, the highest in the Ohio River system. Furthermore, Winfield traffic demand is projected to more than triple over the next 70 years, from 13 million tons in 1980 to 40 million tons by 2050, an annual growth rate of 1.8 percent. Navigation safety has not been a major problem at Winfield Locks, but the potential for navigation accidents was present. The problem stemmed from the orientation of the locks and the design of the lock walls. The 56' X 360' locks are located on the inside of a bend in the river that requires tows to make several maneuvers to enter and exit the locks. This is especially difficult during high river flows. With 800 foot long tows becoming more common, the short upper guard wall also presents a problem. The upper guard wall is only 450 feet long, which means that about half of a tow extends beyond the end of the wall as lockage progresses. This presents a danger that the tow might break up and be swept down on the dam during high-flow conditions. As the number of large tows increases at Winfield, the probability of accidents occurring in such instances also increases.

Average annual benefits for the project total \$56,109,000, all for commercial navigation.

FISCAL YEAR 2002: The requested amount will be applied as follows:

Complete Landscaping	\$ 426,000
Planning, Engineering and Design	124,000
Construction Management	50,000
Total	\$ 600,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total costs of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: Upon completion of the project, a Memorandum of Agreement will be prepared between West Virginia Division of Natural Resources (WVDNR) and the Corps of Engineers for WVDNR to assume responsibility for operation and management of the mitigation area. Annual costs are estimated to be \$30,000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$235,500,000 is an increase of \$8,000,000 from the latest estimate (\$227,500,000) presented to Congress (FY 2001). This change includes the following items:

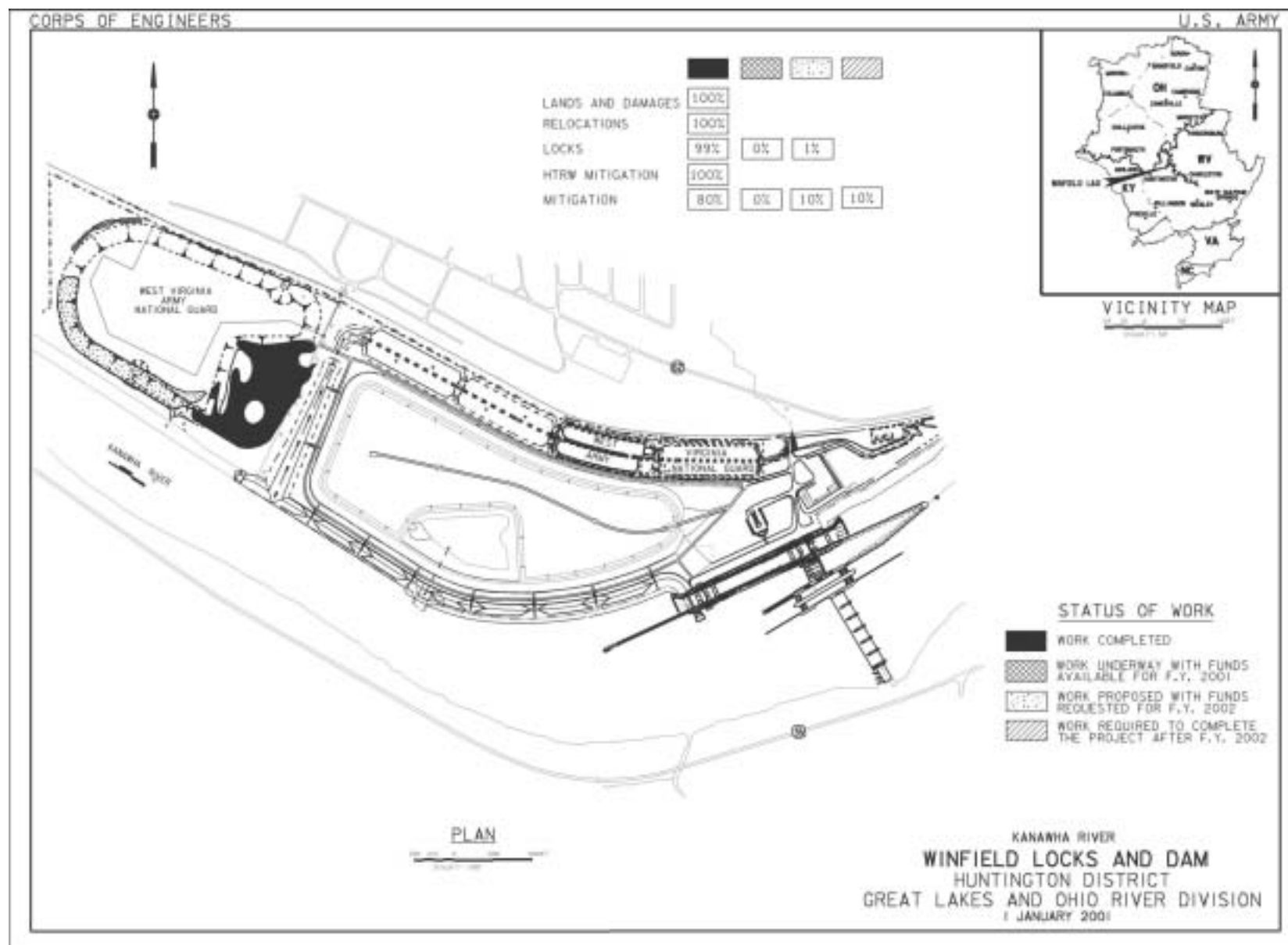
Item	Amount
Price Escalation on Construction Features	\$ 408,000
Design Changes (future mitigation)	5,792,000
Post Contract Award and Other Estimating Adjustments	1,800,000
Total	\$ 8,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency on September 25, 1987. The Ohio River Division Commander signed a Supplemental Environmental Impact Statement (SEIS) on April 28, 1993. The SEIS was prepared because of the need to realign the new lock as a result of hydraulic model testing.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1985 and funds to initiate construction were appropriated in FY 1987.

Hazardous and toxic substances found on the site were removed by former landowner, ACF Industries. Temporary buildings constructed for storage of hazardous materials will be transferred to the National Guard Bureau for controlled storage of equipment. A License Agreement between the Corps and National Guard has been signed allowing the Guard to use the facility until the transfer papers are finalized. The West Virginia National Guard is constructing a complex that would include a combined support maintenance shop, organizational maintenance shop, and armory facility on thirty acres of the downstream disposal area. A License Agreement has been signed for this as well. The thirty acres will be included in the final transfer document. Because this construction would affect the mitigation agreement between the Corps and resource agencies, a memorandum of agreement was executed between the National Guard, the resource agencies, and the Corps for off-site mitigation to replace mitigation acreage lost due to transfer to the Guard.

The scheduled physical completion date has changed from September 2003, the date last submitted to Congress (FY2001), to Being Determined.



3 April 2001

APPROPRIATION TITLE: Construction, General – Shoreline Protection

PROJECT: Chicago Shoreline, Illinois (Continuing)

LOCATION: The project is located in northeast Illinois on the southern shore of Lake Michigan within the City of Chicago in Cook County.

DESCRIPTION: The project consists of constructing shoreline protection structures along 9.2 miles of the shoreline in the Lincoln Park and Burnham Park areas. Other project features include: revetments near the Adler Planetarium and at Meigs Field; a breakwater to protect the South Water Purification Plant near 78th Street; and beach nourishment of two short reaches of shoreline near Fullerton Avenue and at 31st Street.

AUTHORIZATION: Water Resources Development Act of 1996, and Water Resources Development Act of 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 2.9 to 1 at 7 3/4 percent.

TOTAL BENEFIT-COST RATIO: 3.7 to 1 at 7 3/4 percent.

INITIAL BENEFIT-COST RATIO: 5.5 to 1 at 7 3/4 percent (FY 1997).

BASIS OF BENEFIT COST RATIO: Benefit Evaluation approved in March 1998, at October 1997 price levels.

SUMMARIZED FINANCIAL DATA		FED. COST	STATUS: (1 JAN 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$174,188,000	Entire Project	32	Being Determined
Estimated Non-Federal Cost		\$125,194,000	PHYSICAL DATA		
Cash Contributions	\$ 125,194,000		Step Stone Revetment	44,208 feet	
Other Costs	\$ 0		Breakwater Reconstruction	2,670 feet	
Total Estimated Project Cost		\$299,382,000	Beach Replenishment	2,000 feet	

Division: Great Lakes & Ohio River

District: Chicago

Chicago Shoreline, IL

3 April 2001

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SUMMARIZED FINANCIAL DATA (Continued):

		ACCUM PCT. OF EST FED COST
Allocations to 30 September 2000	\$ 48,267,000	
Conference Allowance for FY 2001	19,192,000	
Allocation for FY 2001	19,192,000 ^{1/}	
Allocations through FY 2001	67,459,000	39
Allocation Requested for FY 2002	24,000,000	53
Programmed Balance to Complete After FY 2002	82,729,000	
Unprogrammed Balance to Complete after FY 2002	0	

1/ Reflects \$3,070,000 reduction assigned assigned as savings and slippage, \$3,109,000 to be reprogrammed to the project, and \$39,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: The project area includes 11 miles of the 28 miles of publicly owned shoreline within the City of Chicago. The adjacent land mass and transportation network are protected by continuous revetments and seawalls, most of which were built in the early 1900's. Those constructed of wood pilings and stone cribs have begun to fail. As the land behind the structures is lost due to storms, the high capacity road network which runs parallel to the shoreline will be impacted. These roads carry an estimated 120,000 vehicles per day. Re-routing this traffic will cause serious disruption and significant traffic delay damages. In addition, facilities located on public property, with a capital investment of several billion dollars, will be destroyed. Over the past several years, significant degradation of the existing shore structures has occurred. Large sections of revetment have collapsed as a result of medium duration and intensity storm events. The rate of degradation is increasing, and short-term changes in sections are easily recognizable. The purification plant breakwater had collapsed to the point where gaps in the structure were visible. The breakwater protects the South Water Purification Plant, which services 2.5 million persons.

Average annual benefits are as follows:

Annual Benefits	Amount
Storm Damage Prevention	\$45,127,000
Recreation	26,082,000
Total	\$71,209,000

Division: Great Lakes & Ohio River

District: Chicago

Chicago Shoreline, IL

3 April 2001

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FISCAL YEAR 2002: The requested amount of \$24,000,000 will be applied as follows:

Initiate Construction in Reach 2 (Diversey to Fullerton)	\$ 3,000,000
Continue construction in Reach 2 (Montrose North)	4,500,000
Continue Construction in Reach 4 (37 th to 41 st St)	5,800,000
Continue Construction in Reach 4 (41 st to 43 rd St)	4,000,000
Continue Construction in Reach 2 (Belmont to Diversey)	4,000,000
Engineering & Design	1,040,000
Construction Management	1,660,000
 Total	 \$24,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Pay 35 percent of the costs allocated to hurricane and storm damage reduction for the Federally supportable plan as reduced for credit allowed for non-Federal work under Section 215 of the Flood Control Act of 1968 and/or Section 206 of the Water Resources Development Act of 1992, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hurricane and storm damage reduction facilities	\$ 93,794,000	\$ 463,000
Pay all the incremental costs of the locally preferred plan over the Federally supportable plan as reduced for credit allowed for non-Federal work under Section 215 of the Flood Control Act of 1968 and/or Section 206 of the Water Resources Development Act of 1992.	\$ 31,400,000	
Total Non-Federal Costs	\$125,194,000	\$ 463,000

NON-FEDERAL COST: (continued)

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The City of Chicago and the Chicago Park District are the local sponsors for the project. The reimbursement agreement for protection of the filtration plant (Reach 5) was executed on April 28, 1997. A Project Cooperation Agreement encompassing 31st Street to 33rd Street, 1,000 feet of protection at Belmont Avenue, and beach stabilization at 31st Street was executed in August 1998. The Project Cooperation Agreement for the remainder of the project was executed on May 17, 1999. The Chicago Park District currently owns all lands required for the project. The non-Federal cost estimate of \$125,194,000 which includes cash contribution of \$125,194,000 is a decrease of \$806,000 from the non-Federal cost estimate of \$126,000,000 which includes cash contribution of \$126,000,000 as noted in the PCA.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$174,188,000 is an increase of \$4,117,000 from the latest estimate (\$170,071,000) presented to Congress (FY 2001).

Item	Amount
Price escalation on Construction Features	\$ 4,117,000
Total	\$ 4,117,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: One Environmental Assessment (EA) for entire project was signed on July 3, 1993, and another EA, for additional land at Reach 4, 51st to 54th Street was signed on June 25, 1999.

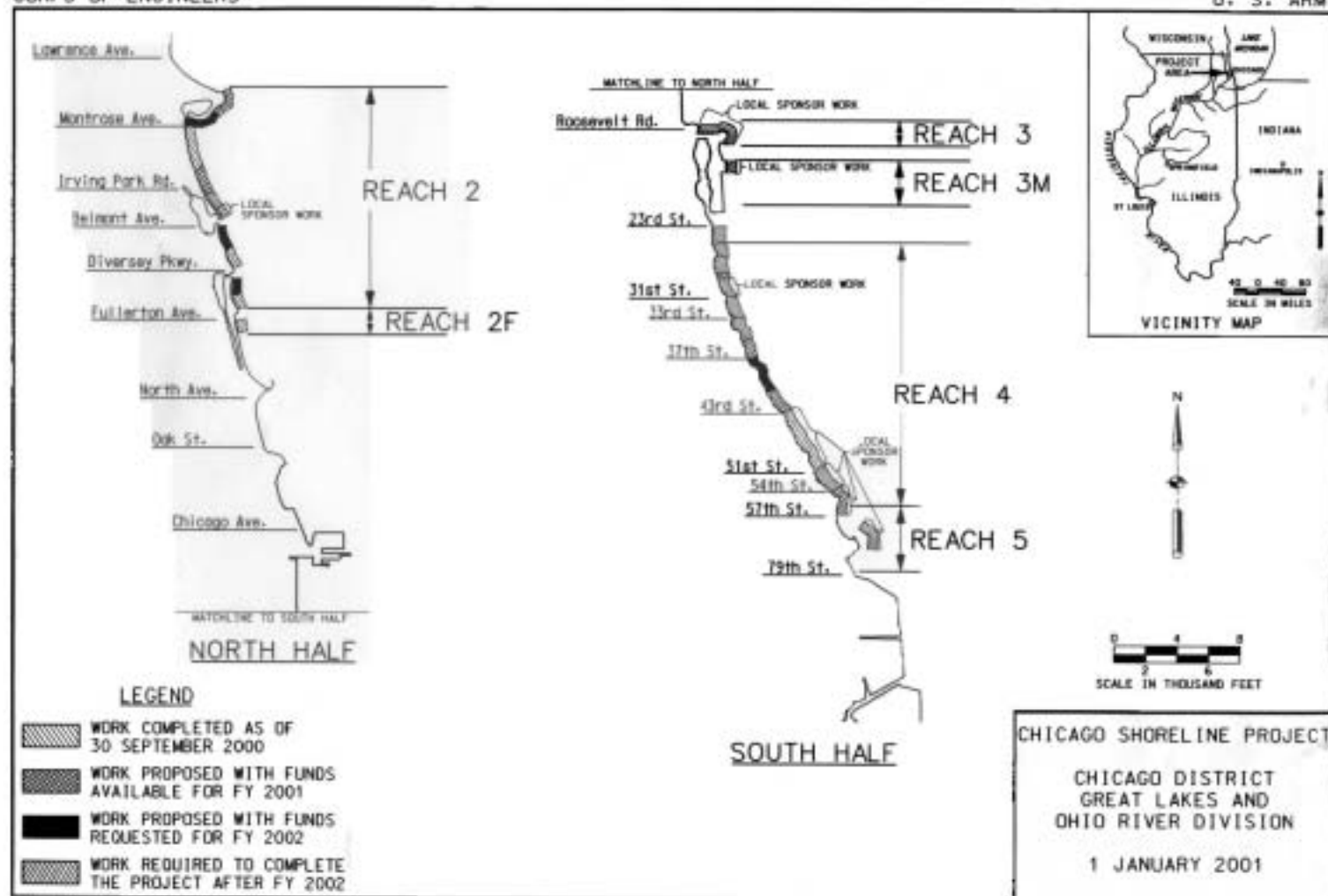
OTHER INFORMATION: Funds to initiate PED were appropriated in FY 1992. Funds to initiate construction were appropriated in FY 1997. The project authorization provides for reimbursement for the Federal share of construction work performed by the non-Federal sponsor in Reach 5. Water Resources Development Act of 1999 authorized credit for work that was performed at Reach 3, Solidarity Drive, prior to execution of the Project Cooperation Agreement.

The Federally supportable plan includes rubblemound revetments in Lincoln Park and Burnham Park. The locally preferred plan substitutes steel sheet pile, and concrete step-stone revetments for the rubblemound revetments. The non-Federal sponsor will pay the incremental costs of the locally preferred plan.

The scheduled completion date has been changed from September 2005, the latest completion date presented to Congress (FY 2001), to Being Determined.

CORPS OF ENGINEERS

U. S. ARMY



3 April 2001

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APPROPRIATION TITLE: Construction General-Shoreline Protection

PROJECT: Presque Isle Peninsula, Pennsylvania (Permanent)(Continuing)

LOCATION: Presque Isle Peninsula is located in the city of Erie, Erie County, Pennsylvania, on the south shore of Lake Erie 78 miles southwest of Buffalo, New York and about 102 miles northeast of Cleveland, Ohio.

DESCRIPTION: The initial construction at Presque Isle State Park consisted of a system of 55 rubblemound breakwaters located offshore along the lakeward length of Presque Isle Peninsula and placement of approximately 560,000 tons of beach sand fill. Each breakwater is 150 feet long with a 350 foot gap between structures. The initial construction was completed in November 1992, but in order to maintain the beaches, a periodic nourishment program for 50 years following the initial project construction is required.

AUTHORIZATION: Water Resources Development Act of 1986 (Public Law 99-662)

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction has been completed.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8 7/8 percent (FY 1988)

BASIS OF BENEFIT-COST RATIO: Benefits based on the Phase II General Design Memorandum approved 27 July 1988 at January 1986 price levels.

SUMMARIZED FINANCIAL DATA:

			STATUS: (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 49,380,000			
Programmed Construction		\$ 49,380,000	Initial Construction	100	Nov 1992
Initial Construction	\$13,435,000		Periodic nourishment	16	Being Determined
Periodic Nourishment	35,945,000				
Estimated Non-Federal Cost		80,190,000			
Programmed Construction	80,190,000				
Initial Construction					
Cash Contribution	13,435,000				
Other Costs (Lands)	0				
Periodic Nourishment					
Cash Contribution	66,755,000				
Other Costs	0				
Total Estimated Project Cost		\$129,570,000			
Initial Construction	26,870,000				
Periodic Nourishment	102,700,000				
		Accum	PHYSICAL DATA		
		Pct. of Est	Initial Construction:		
		Fed. Cost	55 Rubblemound Offshore Breakwaters.		
Allocations to 30 September 2000	18,261,000		560,000 Tons of Beach Replenishment.		
Conference Allowance for FY 2001	580,000		Removal of some existing shore protection structures.		
Allocations for FY 2001	486,000 1/				
Allocations through FY 2001	18,747,000	46			
Allocation Requested for FY 2002	392,000 2/	47	Periodic nourishment:		
Programmed Balance to Complete after FY 2002	30,241,000 2/		55,000 Tons of Beach Nourishment (Annually)		
Unprogrammed Balance to Complete after FY 2002	0				

1/ Reflects \$93,000 reduction assigned as savings and slippage and \$1,000 rescinded in accordance with the Consolidated Appropriations Act, 2001

2/ Reflects 65% non-Federal cost share.

Division: Great Lakes & Ohio River

District: Buffalo

Presque Isle Peninsula, PA

3 April 2001

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JUSTIFICATION: That portion of the project referred to herein as the Initial Construction as detailed in the Phase II General Design Memorandum, which was approved on 27 July 1988 and being a system of segmented breakwaters, was completed in November 1992.

The annual benefits identified in that Design Memorandum updated to current price levels are as follows:

Annual Benefits	Amount
Decreased Maintenance Cost	\$ 167,000
Structural Damage Prevented	7,000
Land Loss Prevention	21,000
Decreased Dredging Costs	401,900
Decreased Nourishment Cost	2,658,600
Total	\$ 3,255,500

FISCAL YEAR 2002: The requested amount of \$392,000 will be applied as follows:

Place sand (Annual Nourishment)	\$ 316,400
Planning, Engineering and Design	52,500
Construction Management	23,100
Total	\$ 392,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation:	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Pay one-half of the separable costs thru FY 01 allocated to recreation, including periodic nourishment, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of breakwater features.	\$ 17,562,000	\$ 95,976
Pay 65% of the separable costs for FY 02 and beyond, allocated to recreation, including periodic nourishment, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of breakwater features.	62,628,000	
Total Non-Federal	\$ 80,190,000	\$ 95,976

STATUS OF LOCAL COOPERATION: The Local Cooperation Agreement was executed by the Assistant Secretary of the Army on 22 June 1989. A LCA amendment will be executed to revise the local cooperation requirements in accordance with changed cost sharing requirements for periodic nourishment (35% Federal, 65% non-Federal) before the FY 02 periodic nourishment is performed. The current non-Federal cost estimate of \$ 80,190,000, is an increase of \$13,855,000 from the non-Federal cost estimate of \$66,335,000 based on changes in projected rates of inflation, reanalysis of requirements to reflect current and projected levels of expenditures and the cost share increase from 50% to 65%.

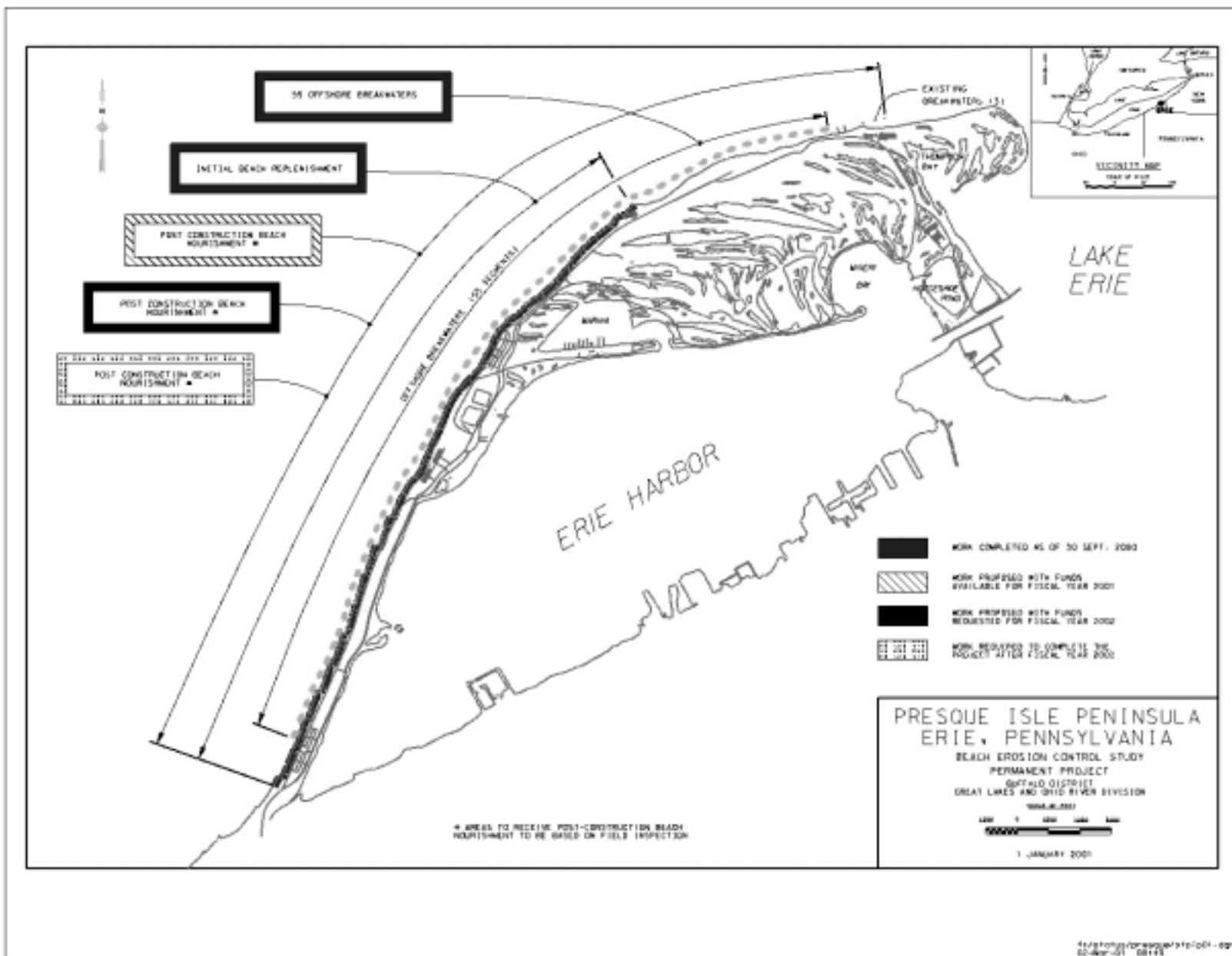
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal Cost Estimate of \$49,380,000 is a decrease of \$16,955,000 from the latest estimate (\$66,335,000) presented to Congress (FY 2001). This change includes the following items:

Item	Amount
Price escalation on construction features and changes in projected inflation rates.	- \$ 886,900
Reanalysis of requirements	- 198,100
Change in cost share	- 15,870,000
Total	- \$16,955,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with USEPA on 13 March 1981. The provisions of Section 404 of the Clean Water Act were met by the Public Notice issued on 9 October 1979, a Section 404(b)(1) Evaluation dated 21 December 1979, and a Section 401 Water Quality Certificate issued by the Commonwealth of Pennsylvania dated 8 August 1988. The Record of Decision which completed the NEPA process was signed by the Director of Civil Works on 2 November 1988.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1984 and funds to initiate construction were appropriated in FY 1988.

The scheduled completion date has changed from June 2042, the latest completion date presented to Congress (FY 2001), to Being Determined.



3 April 2001

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: McCook and Thornton Reservoirs, Illinois (Continuing)

LOCATION: The project area covers 341 square miles of the combined sewer area in Cook County in Chicago and 48 adjacent suburban communities.

DESCRIPTION: The authorized project consists of constructing two reservoirs from stone quarries located in McCook and Thornton, Cook County, Illinois having floodwater storage capacities of 21,400 acre-feet (7 billion gallons) and 14,600 acre-feet (4.8 billion gallons), respectively. The Thornton Reservoir project authorization was modified to evaluate inclusion of the National Resource Conservation Service Thorn Creek Reservoir with the Thornton Reservoir project. A Limited Reevaluation Report, currently under preparation will evaluate the construction of a composite reservoir. This could increase the capacity to 24,200 acre-feet (7.8 billion gallons). The two reservoirs will serve as the termini of the Metropolitan Water Reclamation District of Greater Chicago's TARP project (Tunnel and Reservoir Plan) Phase I tunnels. TARP was developed by Federal, State, regional and local government as a regional plan for reducing flood damages and improving water quality in area waterways. The two reservoirs will capture and store combined sewer flows from the tunnel systems for later treatment after the storm event. Currently, when the tunnels reach their capacity, the combined flow of raw sewage and storm water backs up through the sewer system into basements of homes & businesses and roadways and is discharged directly into area waterways. When storm events are severe, the locks must be opened to release the combined sewer flow into Lake Michigan - the source of drinking water for millions. Reservoir features include pumps, a cutoff wall, main & distribution tunnels/gates/valves, hydraulic structures, wall stabilization, aquifer protection and aeration and washdown systems.

AUTHORIZATION: Water Resources Development Act of 1988, modified by the Water Resources Development Act of 1999.

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 8 1/2 percent.

TOTAL BENEFIT-COST RATIO: 1.7 to 1 at 8 1/2 percent.

INITIAL BENEFIT-COST RATIO: 2.0 to 1 at 8 1/2 percent (FY 1994).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation in the Final Special Reevaluation Report dated February 1999 at October 1997 price levels.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE	
Estimated Federal Cost		\$ 501,100,000	McCook Reservoir	0	Being Determined
Estimated Non-Federal Cost		166,900,000	Thornton Reservoir	0	Being Determined
Cash Contributions	128,182,000		Entire Project	0	Being Determined
Other Costs	38,718,000				
Total Estimated Project Cost		\$ 668,000,000			

ACCUM.
PCT. OF EST.
FED. COST

				PHYSICAL DATA	
Allocations to 30 September 2000	\$ 29,141,000				
Conference Allowance for FY 2001	7,800,000			McCook Reservoir	
Allocation for FY 2001	6,537,000 1/			Storage Capacity	21,400 acre-feet
Allocations through FY 2001	35,678,000	7		Thornton Reservoir	
				Storage Capacity	14,600 acre-feet
Allocation Requested for FY 2002	10,000,000	9			
Programmed Balance to Complete after FY 2002	\$ 455,422,000				
Unprogrammed Balance to Complete after FY 2002	0				

1/ Reflects \$1,248,000 reduction assigned as savings and slippage and \$15,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: The McCook and Thornton Reservoirs Project covers 341 square miles of the combined sewer area in Chicago and suburban communities. Within this region, over 500,000 homes suffer flooding attributable to sewer outfall submergence caused by the inadequate capacity of the area waterways. The McCook Reservoir will provide an additional 7 times the storage capacity of its billion gallon capacity connecting tunnel system and will provide flood damage reduction benefits to Chicago and 36 suburban communities where 146,000 homes and businesses flood annually. The Thornton Reservoir will provide an additional 8 times the storage capacity of its half billion capacity connecting tunnel system and will provide flood damage reduction to Chicago and 13 suburban communities where 35,000 homes and businesses flood annually. The project will also improve water quality in area waterways, reduce untreated sewage backflow into Lake Michigan and reduce beach closures. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Prevention	\$ 80,357,000
Water Quality	14,732,000
Water Supply	7,190,000
Recreation	1,030,000
Total	\$ 103,309,000

FISCAL YEAR 2002: The requested amount of \$10,000,000 will be applied as follows:

McCook Reservoir	
Initiate construction on Pumps	\$ 930,000
Initiate construction on Test Grout	7,000,000
Engineering & Design	937,500
Construction Management	632,500
Thornton Reservoir	
Engineering and Design	500,000
Total	\$ 10,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
McCook Reservoir:		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 5,849,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	23,640,000	
Pay 20 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	101,411,000	4,300,000
Total McCook Reservoir	\$130,900,000	\$4,300,000

Requirements of Local Cooperation (continued)	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Thornton Reservoir:		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 8,432,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), other facilities, where necessary for the construction of the project.	797,000	
Pay approximately 18 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	26,771,000	1,278,000
Total Thornton Reservoir	\$ 36,000,000	\$1,278,000
Total Non-Federal	\$166,900,000	\$5,578,000

STATUS OF LOCAL COOPERATION: The Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) is the local sponsor for the project. The Project Cooperation Agreement for McCook Reservoir was executed on 10 May 1999. The PCA for Thornton Reservoir is scheduled for execution in the 2nd quarter of FY 2002. The current non-Federal cost estimate of \$130,900,000, which includes a cash contribution of \$101,411,000, is an increase of \$1,850,000 from the non-Federal cost estimate of \$129,050,000 noted in the Project Cooperation Agreement, which included a cash contribution of \$99,978,000. The non-Federal sponsor is expected to make all required payments concurrently with project construction.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$501,100,000 is a decrease of \$2,728,000 from the latest estimate (\$503,828,000) presented to Congress (FY 2001). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	- \$2,728,000
Total	- \$2,728,000

Division: Great Lakes & Ohio River

District: Chicago

McCook and Thornton Reservoirs, IL

3 April 2001

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STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Public and Agency review of final Environmental Impact Statement and the Special Re-evaluation Report (EIS/SRR) for the McCook Reservoir project was completed in December 1998. The Record of Decision (ROD) was signed on May 5, 1999.

OTHER INFORMATION: Funds to initiate PED were appropriated in FY 1988. Funds to initiate construction were appropriated in FY 1994. The scheduled completion date has been changed from January 2012, the latest completion date presented to Congress (FY 2001), to Being Determined.

SEPARABLE ELEMENT: McCook Reservoir, Illinois

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		\$393,100,000
Non-Federal Cost		\$130,900,000
Cash Contributions	\$ 101,411,000	
Other Costs	\$ 29,489,000	
Total Estimated Project Cost		\$524,000,000

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 8 1/2 percent

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 8 1/2 percent

SEPARABLE ELEMENT: Thornton Reservoir, Illinois

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		\$108,000,000
Non-Federal Cost		\$ 36,000,000
Cash Contributions	\$26,771,000	
Other Costs	\$ 9,229,000	
Total Estimated Project Cost		\$144,000,000

Division: Great Lakes & Ohio River

District: Chicago

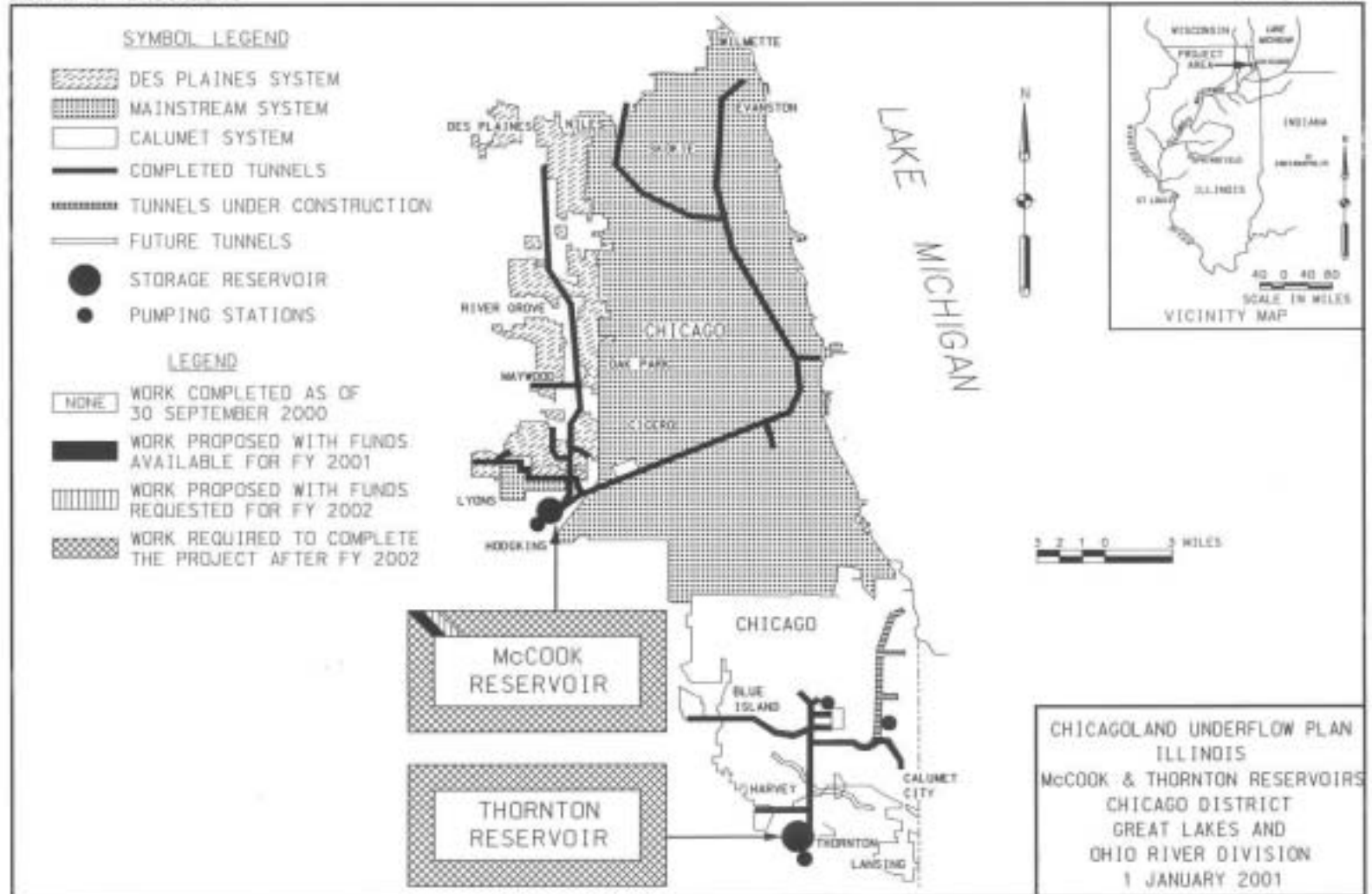
McCook and Thornton Reservoirs, IL

3 April 2001

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REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 8 1/2 percent

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 8 1/2 percent.



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Indianapolis, White River (North), Indiana (Continuing)

LOCATION: The project encompasses approximately 3.0 miles of the White River in the City of Indianapolis, Indiana.

DESCRIPTION: The recommended plan consists of a combination of floodwall and levee flood protection along approximately 3.0 miles of the east bank of the White River in Indianapolis. The project will be constructed in three phases. The first phase will consist of the rehabilitation of an existing pump station and the development of a flood warning plan and system. The second phase will consist of 2 mitigation sites totaling 37 acres of reforestation and mitigation. The third phase will consist of the construction of 19,150 feet of sheetpile floodwall with concrete facing and 1,220 feet of earthen levee.

AUTHORIZATION: Flood Control Act of 1936 as amended by the Flood Control Act of 1938, and subject to cost sharing provisions of the Water Resources Development Act of 1986.

REMAINING BENEFIT-COST RATIO: 3.2 to 1 at 7 1/8 percent

TOTAL BENEFIT-COST RATIO: 2.5 to 1 at 7 1/8 percent

INITIAL BENEFIT COST RATIO: 2.42 to 1 at 7 1/8 percent (FY 2000)

BASIS OF BENEFIT COST RATIO: A Benefit Evaluation conducted in May 1997 at October 1995 price levels.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$ 12,806,000	Phase I	10	Being Determined
		Phase II	10	Being Determined
Estimated Non-Federal Cost	4,268,000	Phase III	10	Being Determined
Cash Contribution	3,007,000	Entire Project	10	Being Determined
Other Costs	1,261,000			
		PHYSICAL DATA		
Total Estimated Project Cost	\$ 17,074,000	Floodwall		(Phase III) 19,150 ft.
		Levees		(Phase III) 1,220 ft.
		Mitigation Sites		(Phase II) 2
		Pump Station Rehab		(Phase I) 1
		Flood Warning Plan and System		(Phase I) 1
		ACCUM.		
		PCT OF EST. FED. COST		
Allocations to 30 September 2000	\$ 793,000			
Conference Allowance for FY 2001	934,000			
Allocation for FY 2001	783,000 ^{1/}			
Allocations through FY 2001	1,576,000	12		
Allocation Requested for FY 2002	3,600,000	40		
Programmed Balance to Complete after FY 2002	7,630,000	100		
Unprogrammed Balance to Complete after FY 2002	0			

^{1/} Reflects a reduction of \$149,000 as savings and slippage and \$2,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: Urban expansion in Hamilton County to the north and Hancock County to the east is impacting hydrologic characteristics of the urbanized watersheds in Marion County. The recent flooding of January 1991 forced evacuation of 500 to 600 homes and damaged many more. Roadways were flooded causing severe damage and loss of access; and several serious injuries were reported. Based on current flood damage survey data, a one percent annual flood event would cause damages of \$57,930,000 (1995 price levels) in the Warfleigh area. The recommended plan reduces average annual flood damages by 90 percent in the Warfleigh area. The recommended plan would have a 0.35% annual exceedance probability.

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	\$ 2,898,000
Flood Insurance	49,000
Total	\$ 2,947,000

FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Lands and Damages Federal Administration	\$ 10,000
Continue Fish & Wildlife Facilities	39,000
Continue Pump Station Construction Contract	909,000
Initiate Levees & Floodwall Contract	2,121,000
Planning, Engineering, and Design	71,000
Construction Management	450,000
Total	\$ 3,600,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Const/Reimb	Annual OMRR&R Costs
Requirements of Local Cooperation		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 1,225,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	36,000	
Pay approximately 19 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of flood control facilities.	3,007,000	21,000
Total Non-Federal Costs	\$ 4,268,000	

The non-Federal sponsor will be required to make all payments concurrently with project construction.

Floodplain Management Requirement.

A flood warning preparedness plan will provide significant benefit to the project area and will continue to be developed in close cooperation with City officials. In addition, the sponsor will be required to participate in and comply with applicable Federal Floodplain Management and Flood Insurance Programs in accordance with Section 402 of Public Law 99-662 as amended by Section 202(c) of Public Law 104-303. Finally, the sponsor will be required to publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the floodplain and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the project. The sponsor must prepare a flood plain management plan within 1 year after signing a Project Cooperation Agreement for construction and must implement such plan not later than 1 year after completion of construction of the project.

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the City of Indianapolis, Indiana. The sponsor has provided all necessary local assurances for this stage of project development. The City of Indianapolis is a legally constituted public body with the full power, authority, and capability to perform the terms of the Project Cooperation Agreement (PCA). The terms of the PCA have been discussed with the sponsor and they understand their responsibilities. The PCA was executed in December 2000. The City of Indianapolis will fund its share of project costs through revenue generated from the flood district tax which is part of the property tax mechanism for the entire county.

The current non-Federal cost estimate of \$4,268,000, which includes a cash contribution of \$3,007,000 is a decrease of \$7,000 from the non-Federal cost estimate of \$4,275,000 noted in the Project Cooperation Agreement, which included a cash contribution of \$3,014,000.

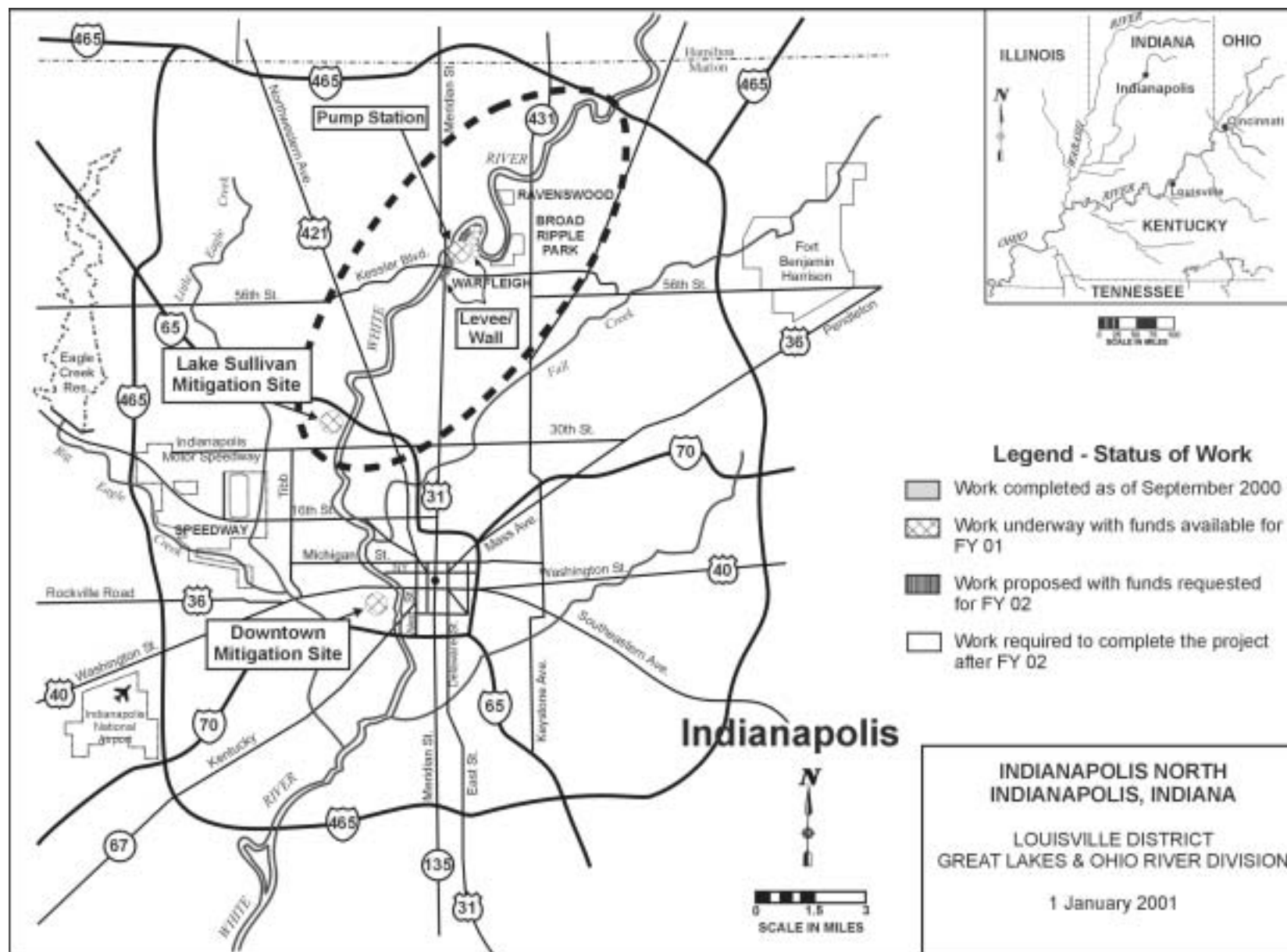
COMPARISON OF FEDERAL COST ESTIMATES: The Federal Cost estimate of \$12,806,000 is an increase of \$60,000 from the latest estimate (\$12,746,000) presented to Congress (FY2001). The change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$60,000
Total	\$60,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A draft Environmental Impact Statement was circulated in May 1996 to all concerned agencies and the public for review. A final EIS was completed in September 1996 incorporating agency and public comments.

OTHER INFORMATION: Funds to initiate Preconstruction Engineering and Design were received in FY 1996. Initial construction funds were received in FY 2000. Fish & Wildlife mitigation cost is \$106,400.

The scheduled physical completion date has changed from November 2003, the date last submitted to Congress (FY2001), to Being Determined



3 April 2001

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Little Calumet River, Indiana (Continuing)

LOCATION: The Little Calumet River Basin, Northwest Indiana, Lake County.

DESCRIPTION: The project consists of replacing 9.5 miles of existing spoil bank levees with 12.1 miles of new levees, floodwalls, and closure and appurtenant structures between the Illinois-Indiana State line and Cline Avenue in Gary, Indiana; constructing 9.7 miles of set-back levees and appurtenant drainage structures; installing a flow control structure at Hart Ditch; permanent evacuation of 37 structures in the Black Oak area of Gary, Indiana; construct a betterment levee from Cline to Clark; modifying 7 miles of channel with 3 accompanying bridge culvert modifications; modifying 1 highway bridge; constructing 16.8 miles of hiking/biking trails and accompanying recreation support facilities, and preserving 788 acres of wildlife habitat. A Post Authorization Change Report was approved in May 1999 extending the eastern limit of the project to include the Marshaltown area.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 1.6 to 1 at 8 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 8 5/8 percent.

INITIAL BENEFIT-COST RATIO: 2.1 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1994 at 1993 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$139,000,000	Entire Project	49	Being Determined
Estimated Non-Federal Cost		50,000,000			
Cash Contributions	11,407,000				
Other Costs	38,593,000				

			PHYSICAL DATA		
			Levees and Floodwalls		21.8 miles
			Pumping Plant Modifications		17
			Structures Removed		37
			Structures Floodproofed		53
			Channel Modification		7 miles
			Hiking Trails		16.8 miles

			ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2000	\$70,566,000		
Conference Allowance for FY 2001	8,843,000		
Allocation for FY 2001	7,411,000	1/	
Allocations through FY 2001	77,977,000		56
Allocation Requested for FY 2002	4,000,000		59
Programmed Balance to Complete After FY 2002	57,023,000		
Unprogrammed Balance to Complete after FY 2002	0		

1/ Reflects \$1,415,000 reduction assigned as savings and slippage and \$17,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: Overbank flood damages occur to 8,600 structures, primarily residential, along the Little Calumet River in Indiana within the communities of Hammond, Munster, Griffith and Gary. The total value of these structures is in excess of \$775 million. Flood damages also occur to commercial and public buildings, golf courses and the transportation network. The major highway transportation link between the Chicago metropolitan area and the eastern United States, Interstate 80/94, is susceptible to closure beginning at a 40-to 50-year flood event. Average annual benefits (October 1993 price levels) are estimated at

Division: Great Lakes & Ohio River

District: Chicago

Little Calumet River, IN

3 April 2001

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JUSTIFICATION: (continued)

\$18,607,000. The project will provide essentially a 200-year level of flood protection. An estimated \$35 million in flood damages were incurred and one life lost in the November 1990 flood, the most recent significant flood event. The communities of Hammond, Highland and Munster, IN were inundated. The President declared the area inundated by the November 1990 flood a National Disaster Area on December 6, 1990. The State of Indiana continues to rate the flood damage potential along the Little Calumet River as the most severe in the state. The project avoids the short-and long-term adverse impacts associated with the destruction or modification of wetlands by designating the existing wetland areas in the Gary reach for overbank flood storage, a vital requirement of the hydraulic operation and design of the project, and hence required project lands. Environmental attributes are being mitigated for, as well as, enhanced along the river corridor. Lake County, Indiana qualifies as an area of persistent and chronic unemployment. A minority plan has been developed that identifies construction contracts which can be set aside for small business contractors and minority owned/Section 8A contractors who exist in the project area. A 40 percent minority participation goal has been established for all future construction contracts for the Contractor's aggregate workforce in each trade. The project will create 424 man-years of labor during the construction period.

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Prevention	\$15,917,000
Recreation	468,000
Land Enhancement	2,222,000
Total	\$18,607,000

FISCAL YEAR 2002: The requested amount of \$4,000,000 will be applied as follows:

Complete construction on Pump Stations 1A and 1B	\$ 1,600,000
Continue construction on N 5 th Pump	800,000
Initiate construction on Burr St Phase II	500,000
Initiate construction on Mitigation I	500,000
Engineering and Design	200,000
Construction Management	400,000
Total	\$ 4,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing requirements contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$18,236,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project, which may be reduced for credit allowed based on prior work (Section 104 of the Water Resource Development Act of 1986) after reductions for such credit have been made in the required cash payments.	18,810,000	
Pay one-half separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities;	2,521,000	
Pay 5 percent of the costs allocated to flood control (other than non-structural measures) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	8,323,000	150,000
Pay 25 percent of the first cost allocated to non-structural flood control measures.	1,877,000	
Pay 25 percent of the costs allocated to fish and wildlife enhancement, and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation and replacement of the rehabilitation and replacement of the fish and wildlife facilities.	233,000	
Total Non-Federal Costs	\$50,000,000	\$ 150,000

STATUS OF LOCAL COOPERATION: The Little Calumet River Basin Development Commission is the local sponsor for the project. The Local Cooperation Agreement (LCA) was executed on August 16, 1990. The LCA was supplemented twice to include the East Reach Remediation, 30 July 1999 and Burr Street Betterment, 26 April 2000.

The current non-Federal cost estimate of \$50,000,000, which includes a cash contribution of \$11,407,000, is an increase of \$26,400,000 from the non-Federal cost estimate of \$23,600,000 noted in the Local Cooperation Agreement, which included a cash contribution of \$4,800,000. The non-Federal sponsor is financially capable and willing to contribute the non-Federal share. The local sponsor has received approval for Section 104 credits in the amount of \$1,667,200.

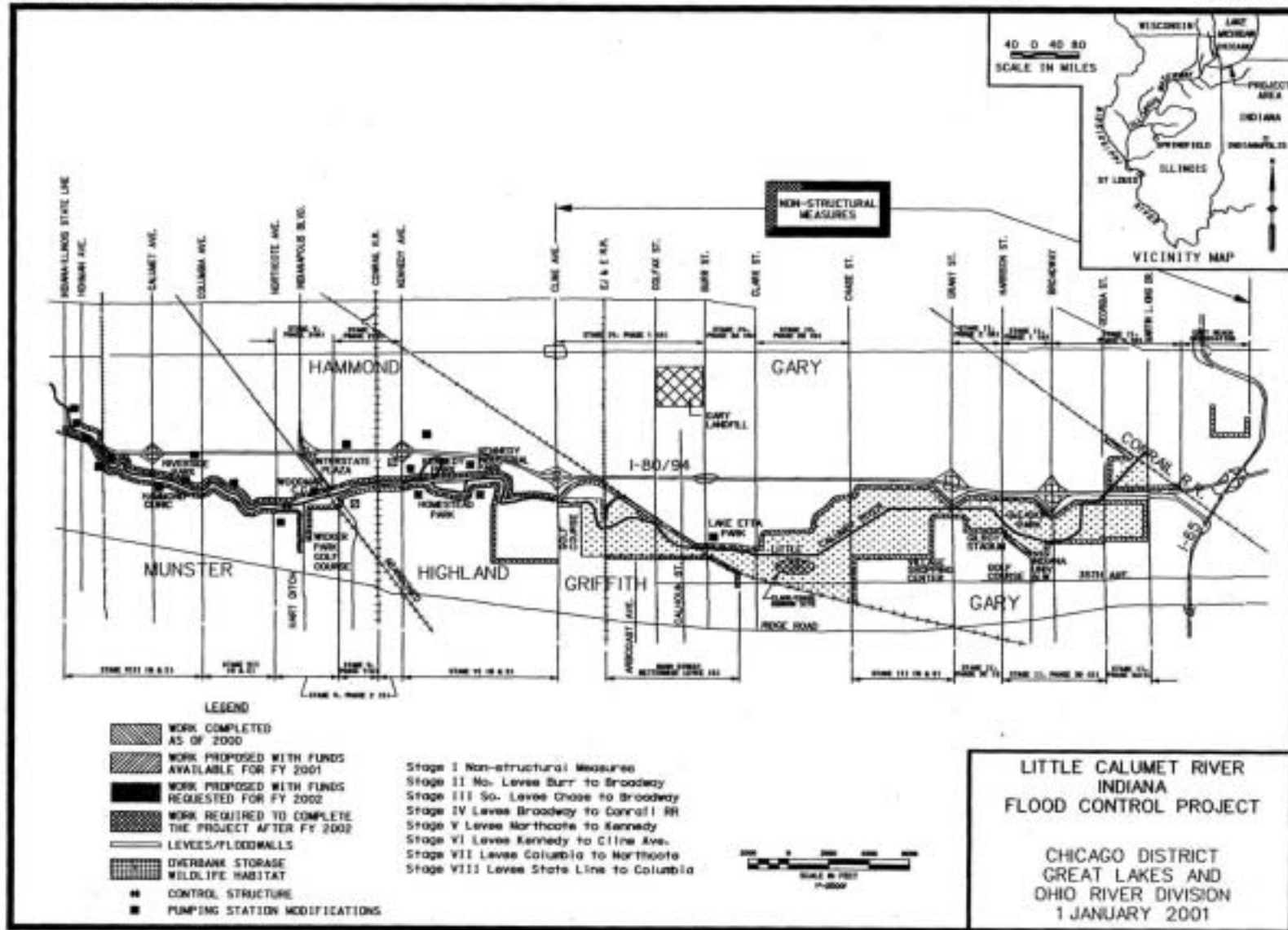
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$139,000,000 is an increase of \$4,491,000 from the latest estimate (\$134,509,000) presented to Congress (FY 2001). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 4,491,000
Total	\$ 4,491,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the United States Environmental Protection Agency on February 3, 1984. The Record of Decision was signed on July 13, 1990. Environmental Assessments (EA) were subsequently prepared addressing potential borrow and disposal sites which were not covered in the EIS and the three Findings of No Significant Impact which were signed by the District Engineer on May 9, 1990, July 11, 1991 and April 21, 1992. A supplemental Environmental Impact Statement was completed for the levee re-alignment, excavated ponding areas and new borrow sites. The Record of Decision was signed on June 23, 1995.

OTHER INFORMATION: Funds to initiate PED were appropriated in FY 1984 and funds to initiate construction were appropriated in FY 1990. Fish and wildlife mitigation and enhancement costs for this project are estimated at \$4,493,000. A Section 902 Post Authorization Change report was approved on 5 December 2000.

The scheduled completion date has changed from September 2008, the latest completion date presented to Congress (FY 2001), to Being Determined.



LAC-2001

APPROPRIATION TITLE: Construction, General (Flood Control)

PROJECT: Ohio River Greenway Public Access, Indiana (Continuing)

LOCATION: The Ohio River Greenway is a seven-mile linear corridor that extends from the City of Jeffersonville through the Town of Clarksville to the City of New Albany, Indiana, along the Ohio River Shoreline. The project extends from Ohio River Mile 602 to Ohio River Mile 609. The corridor adjoins the McAlpine Locks and Dam project and the Falls of the Ohio National Wildlife Conservation Area on the Indiana side of the river.

DESCRIPTION: Federal participation in discrete recreation facilities is authorized, but these facilities will not be implemented as part of the project. The main project features consist of a vehicular parkway, pedestrian and multi-use paths, a bridge, and two levee cuts for additional access to the river. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT-COST RATIO: 2.0 to 1 at 6 7/8 percent

TOTAL BENEFIT COST RATIO: 2.0 to 1 at 6 7/8 percent

INITIAL BENEFIT COST RATIO: 2.0 to 1 at 6 7/8 percent (FY 2001)

BASIS OF BENEFIT COST RATIO: Economic Analysis, Report on the Ohio River Greenway Corridor, dated January 2000 at 1 Oct 1999 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 17,500,000	Entire Project	11	Being Determined
Estimated Non-Federal Cost		\$ 17,500,000	PHYSICAL DATA		
Cash Contribution	10,864,000		Levee Cuts		85 ft.
Other Costs	6,654,000		Roadway		7 mi.
Total Estimated Project Cost		\$ 35,000,000	Trails/Paths		14 mi.
			Gates		2
			Bridge		1

Division: Great Lakes & Ohio River

District: Louisville

Ohio River Greenway Corridor, IN

3 April 2001

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SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2000	\$ 1,952,000	
Conference Allowance for FY 2001	1,500,000	
Allocation for FY 2001	1,257,000 1/	
Allocations through FY 2001	3,209,000	18
Allocation Requested for FY 2002	2,400,000	32
Programmed Balance to Complete after FY 2002	15,891,000	100
Unprogrammed Balance to Complete after FY 2002	0	

1/ Reflects \$240,000 reduction assigned as savings and slippage and \$3,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: The primary purpose of this project is to enhance public access to the amenities of the Ohio River in the vicinity of the local flood protection project. After the 1937 flood, which caused considerable damage to the southern Indiana communities of Jeffersonville, Clarksville, and New Albany, the Federal Government participated in the construction of a flood damage reduction project to protect these communities from future flooding. The existing local protection projects, which consists of approximately eight miles of earth levee, 2.5 miles of concrete wall, and 16 pumping plants, is operated and maintained by these three communities. The series of earth levees and concrete floodwalls was constructed between 1937 and 1953 and protects approximately 80,000 residents and physically separates them from the river. The local flood protection project continues to serve its function, however, it separates or cuts off the communities from the riverfront and provides them with limited access for operation and maintenance of the facilities. If constructed today, the project would provide the local communities opportunities to more efficiently operate and maintain the existing flood control facilities and provide better access to the amenities of the Ohio River.

Average annual benefits are as follows:	Annual Benefits	Amount
	Access	\$2,100,000
	Total	\$2,100,000

Division: Great Lakes & Ohio River

District: Louisville

Ohio River Greenway Corridor, IN

3 April 2001

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FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Construction of the New Albany Project	\$ 869,000
Continue Construction of the Jeffersonville Project	1,092,000
Initiate Construction of the Clarksville Project	198,000
Planning, Engineering, and Design	196,000
Construction Management	45,000
Total	\$ 2,400,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in Water Resources Development Act 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation Maintenance, Repair Rehabilitation and Replacement Costs
Provide lands, easements, rights of way, relocations, and dredged material disposal areas.	\$ 6,654,000	
Pay 33.9 percent of the costs allocated to access facilities, as reduced for credit to allow for non-Federal work, to bring the total non-Federal share of costs to 50 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of access facilities.	10,846,000	\$ 809,000
Total Non-Federal Costs	\$ 17,500,000	\$ 809,000

STATUS OF LOCAL COOPERATION: There are four non-Federal sponsors: The Ohio River Greenway Development Commission, the City of New Albany, the Town of Clarksville, and the City of Jeffersonville. Each has sent in Letters of Intent, dated 17 December 1999, indicating their wiliness to enter into binding agreements with the Federal Government to fulfill the required items of local cooperation. The Project Cooperation Agreement is scheduled for execution in September 2001. The local sponsors have spent about \$1 million on the access road to this point, using mainly local funds. The Greenway Commission and local communities have recently obtained over \$3 million in grant funds that will be used for the project. The sponsors' source of funding will mainly come from state and local sources.

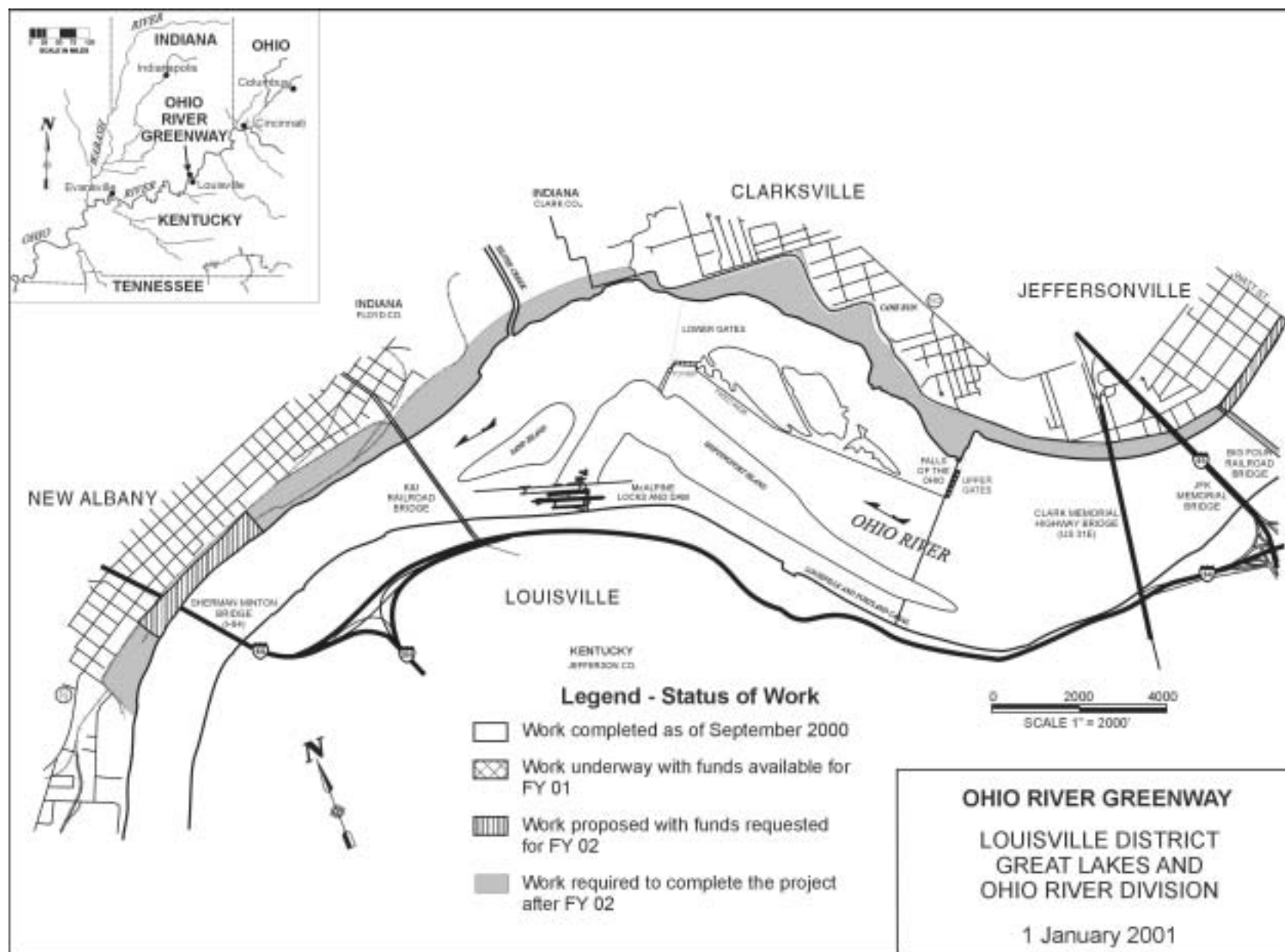
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$17,500,000 is an increase of \$2,500,000 from the latest estimate (\$15,000,000) presented to Congress (FY 2001). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	\$2,500,000
Total	\$2,500,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: No Environmental Impact Statement is required. An Environmental Assessment and Finding of No Significant Impact was completed in January 2000.

OTHER INFORMATION: The Ohio River Greenway Project was approved for construction by the ASA (CW) in April 2000. Funds to initiate preconstruction, engineering and design were first appropriated in FY 1993 and funds to initiate construction were first appropriated in FY 2001.

The scheduled completion date has been changed from September 2006, the latest completion date presented to Congress (FY 2001), to Being Determined.



3 April 2001

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APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Metropolitan Louisville, Beargrass Creek, KY (Continuing)

LOCATION: The project is located in eastern Jefferson County in the suburbs of Louisville, Kentucky along the South Fork Beargrass Creek and Buechel Branch.

DESCRIPTION: The project consists of construction of eight detention basins, about 2000 linear feet of channel improvement, and 1400 linear feet of floodwall/levee on the South Fork of Beargrass Creek and Buechel Branch. The project will provide protection to 830 structures (combination of residential and commercial). Of those structures, 314 will be removed from the 1% chance floodplain. The 1% chance flood will be reduced an average of 1.5 feet, as a result of project implementation. All work is programmed.

AUTHORIZATION: The Water Resource Development Act of 1999.

REMAINING BENEFIT-COST RATIO: 3.40 to 1 at 6 7/8 percent.

TOTAL BENEFIT-COST RATIO: 2.53 to 1 at 6 7/8 percent.

INITIAL BENEFIT COST RATIO: 2.70 to 1 at 6 7/8 percent (FY 2001)

BASIS OF BENEFIT COST RATIO: Benefits are from the Final Feasibility Report dated Sep 1997 at October 1996 price levels.

Division: Great Lakes & Ohio River

District: Louisville

Metropolitan Louisville, Beargrass Creek, KY

3 April 2001

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SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$7,951,000	Entire Project	20	Being Determined
Estimated Non-Federal Cost	\$4,282,000			
			PHYSICAL DATA	
Cash Contribution	\$1,182,000			
Other Costs	\$3,100,000	Floodwall/Levee Channel Improvement Detention Basins		1,400 feet 2,000 feet 8
Total Estimated Project Cost	\$12,233,000			
		ACCUM. PCT. OF EST. FED. COST		
Allocations to 30 September 2000	620,000			
Conference Allowance for FY 2001	1,000,000			
Allocation for FY 2001	650,000 1/			
Allocations through FY 2001	1,270,000	16		
Allocation Requested for FY 2002	2,575,000	48		
Programmed Balance to Complete after FY 2002	4,106,000	100		
Unprogrammed Balance to Complete after FY 2002	0			

1/ Reflects a reduction of \$160,000 assigned as savings and slippage, reprogramming from the project of \$188,000, and \$2,000 rescinded in accordance with the Consolidated Appropriations Act, 2000.

Division: Great Lakes & Ohio River

District: Louisville

Metropolitan Louisville, Beargrass Creek, KY

3 April 2001

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JUSTIFICATION: Approximately 26 percent of Jefferson County's population resides in the Beargrass Creek Basin. In recent years, the great majority of the 60.0 square mile basin has been developed. The value of development in the study area is estimated at \$500,000,000. Stream reaches of the South Fork of Beargrass Creek are subject to inundation as a result of insufficient in-bank flowage areas and increased runoff from upstream development. Upstream industrial, commercial, and residential development also has contributed to increased storm runoff and flooding on South Fork Beargrass Creek. Major floods occurred in the basin in 1960, 1964, 1970, 1973, and 1997. Based on October 1995 prices and conditions, a 100-year frequency flood in the basin would result in approximately \$55 million in damages to 929 structures. The recent March 1997 flood inflicted an estimated \$8 million in damages within the basin. The average annual benefits amount to \$2,368,000, all for flood damage reduction.

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	\$2,368,000
Total	\$2,368,000

FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Federal Admin for Lands & Damages	\$ 40,000
Continue Channels, Canals, & Basins	2,165,000
Continue Fish & Wildlife	20,000
Planning, Engineering, and Design	150,000
Construction Management	200,000
Total	\$2,575,000

Division: Great Lakes & Ohio River

District: Louisville

Metropolitan Louisville, Beargrass Creek, KY

3 April 2001

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NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments during Construction and Reimbursements	Annual Operation Maintenance, Repair Rehabilitation and Replacement Costs
Provide lands, easements, rights of way, and dredged material	\$ 2,960,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	140,000	
Pay 9.7 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 35 percent and bear all costs of operation, maintenance, repair, and rehabilitation.	1,182,000	24,000
Total Non-Federal Costs	\$ 4,282,000	\$ 24,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal cost sharing partner is the Louisville and Jefferson County Metropolitan Sewer District (MSD). MSD cost shared the feasibility phase of the project. A PED phase cost sharing agreement with MSD was executed in January 1998. The Chief of Engineer's report approved the project in May 1998.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$7,951,000 is initial estimate presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was prepared and circulated for review. A Finding Of No Significant Impact was signed in September 1997.

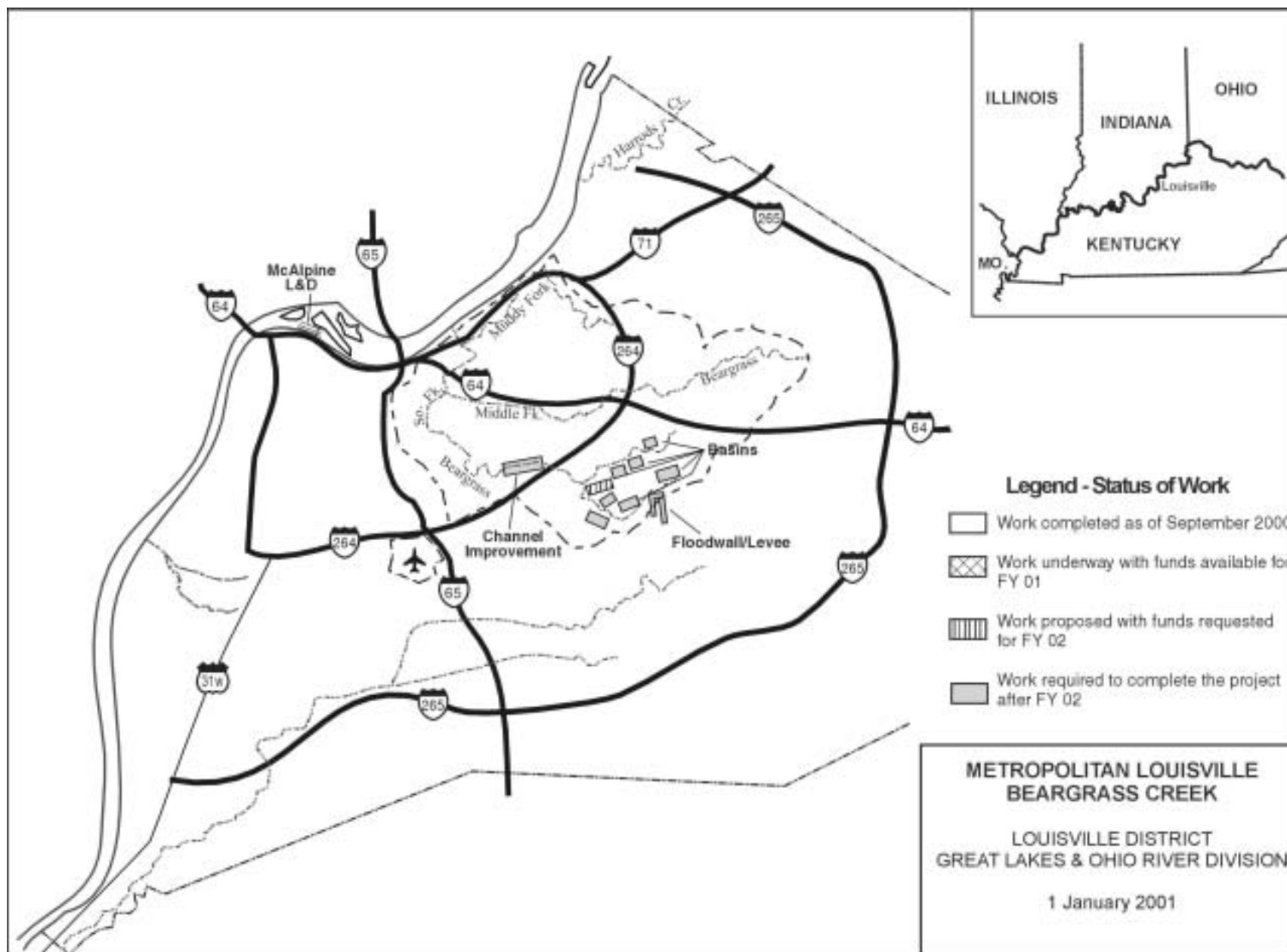
OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001. The project is scheduled for construction award in August 2001.

The scheduled completion date is Being Determined.

Division: Great Lakes & Ohio River

District: Louisville

Metropolitan Louisville, Beargrass Creek, KY



3 April 2001

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Metropolitan Louisville, Pond Creek, Kentucky (Continuing)

LOCATION: The project is located in the central and eastern portions of the 126 square mile Pond Creek watershed, in southern Jefferson County, Kentucky.

DESCRIPTION: The project consists of construction of detention basin storage at the Melco Detention Basin on Northern Ditch and the Vulcan Quarry Detention Basin on Fishpool Creek; channel enlargement along approximately 2.4 miles of Pond Creek and 1.5 miles of Northern Ditch; a multipurpose maintenance road/hiking trail along the Pond Creek channel improvement; and a fifteen acre wetlands environmental restoration component at a site owned by the local sponsor. All work is programmed.

AUTHORIZATION: The Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 3.44 to 1 at 7 3/4 percent.

TOTAL BENEFIT-COST RATIO: 2.33 to 1 at 7 3/4 percent.

INITIAL BENEFIT-COST RATIO: 2.78 to 1 at 7 3/4 percent (FY 1997).

BASIS OF BENEFIT COST RATIO: Benefits are from the Project Design Memorandum, dated May, 1995, at 1995 price levels.

Division: Great Lakes & Ohio River

District: :Louisville

Metropolitan Louisville, Pond Creek, KY

3 April 2001

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SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$13,524,000	Entire Project	65	Being Determined
Estimated Non-Federal Cost		\$ 5,776,000	PHYSICAL DATA		
Cash Contribution	1,295,000				
Other Costs	4,481,000		Channel Improvement		3.9 miles
			Detention Basin Storage		2 @
1,600 acre/ft					
Total Estimated Project Cost		\$19,300,000	Wetlands Env. Restoration		15 acres
			Maint. Rd/Hike-Bike Trail		3.4 miles
			Permanent Easements		65.7 acres
			ACCUM. PCT. OF EST. FED. COST		
Allocations to 30 September 2000		3,844,000			
Conference Allowance for FY 2001		4,000,000			
Allocation for FY 2001		4,821,000 1/			
Allocations through FY 2001		8,665,000	64		
Allocation Requested for FY 2002		1,400,000	74		
Programmed Balance to Complete after FY 2002		3,459,000	100		
Unprogrammed Balance to Complete after FY 2002		0			

1/ Reflects \$640,000 assigned as savings and slippage, reprogramming to the project of \$1,469,000 and \$8,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

Division: Great Lakes & Ohio River

District: :Louisville

Metropolitan Louisville, Pond Creek, KY

3 April 2001

115

JUSTIFICATION: The project is located in southwestern Jefferson County, Kentucky and drains an area of approximately 71 square miles. Approximately 5,500 structures are located within the highly urbanized Pond Creek flood plain. Due to rapid residential and commercial development within the area, properties along Pond Creek and tributaries now have only a two year level of protection, leaving residential, commercial, and industrial structures vulnerable to disastrous flash floods. The flood of record occurred in March, 1964. A recurrence of this flood today would result in damages of approximately \$106.0 million, under 1995 price levels and conditions of development. The most recent flood experienced in the basin, a five-year event, occurred in February, 1990 and caused damages to residential and commercial properties in the basin that totaled approximately \$1 million.

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	\$ 3,999,000
Recreation	76,000
Total	\$ 4,075,000

FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Lands and Damages Federal Administration	\$ 38,000
Continue Wildlife Facilities	61,000
Continue Channels and Canals	1,059,000
Initiate Recreation Contract	50,000
Planning, Engineering, and Design	93,000
Construction Management	99,000
Total	\$ 1,400,000

Division: Great Lakes & Ohio River

District: :Louisville

Metropolitan Louisville, Pond Creek, KY

3 April 2001

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NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Const/Reimb	Annual OMRR&R Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal area.	4,481,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.		
Pay approximately 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 29 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of flood control facilities, which meets mandatory 5% cash requirement plus total of all LERRD credits.	911,000	68,000
Pay one-half of the separable costs allocated to recreation and bear all costs to operate, maintain, repair, replace, and rehabilitate recreation facilities.	245,000	1,000
Pay approximately 22.7 percent of the costs allocated to environmental restoration to bring the total non-Federal share of environmental restoration costs to 25 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of environmental restoration facilities.	139,000	1,000
Total Non-Federal Costs	\$ 5,776,000	\$ 70,000
The non-Federal sponsor has agreed to make all payments concurrently with project construction.		

Division: Great Lakes & Ohio River

District: :Louisville

Metropolitan Louisville, Pond Creek, KY

3 April 2001

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STATUS OF LOCAL COOPERATION: The non-Federal cost sharing partner is the Louisville and Jefferson County Metropolitan Sewer District (MSD). The MSD participated in the Feasibility Study for the Pond Creek project and has filed a Letter of Intent and Financial Capability Statement regarding its intention to cost share in the project. MSD also has furnished a copy of its Operating and Capital Budget Plan, which contains funding provisions for the project.

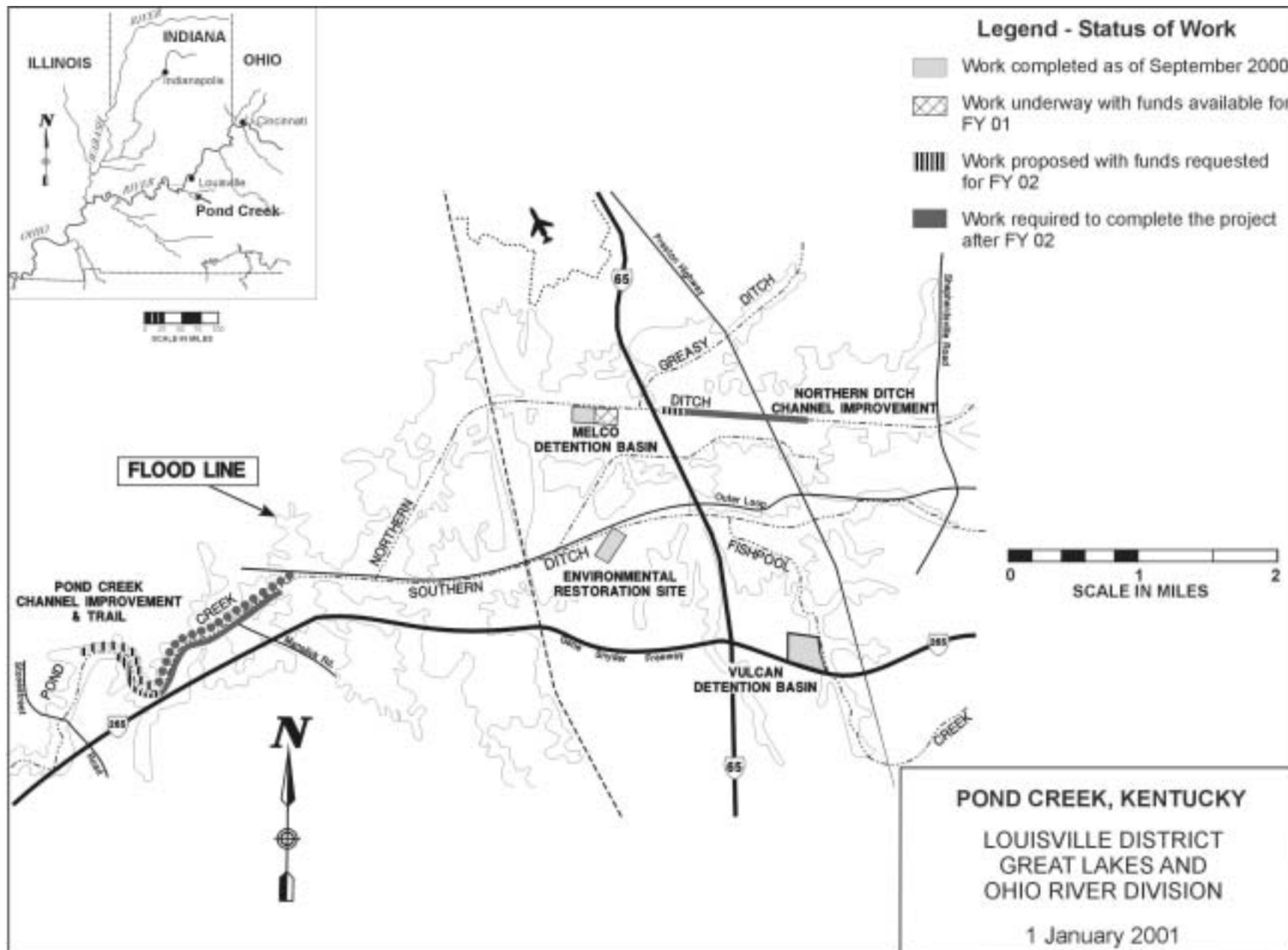
The Project Cooperation Agreement was executed in March 1998. The current non-Federal cost estimate of \$5,776,000, which includes a cash contribution of \$1,295,000, is an increase of \$534,000 from the non-Federal cost estimate of \$5,242,000 noted in the Project Cooperation Agreement, which included a cash contribution of \$1,074,000. The non-Federal sponsor continues to demonstrate they have a reasonable and implementable plan for meeting their financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$13,524,000 is the same as the latest estimate (\$13,524,000) presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment and a Finding of No Significant Impacts (FONSI) have been signed and were included in the Interim Feasibility Report, dated March, 1994. In addition, a Section 404(b)(1) Evaluation has been completed and a 401 Water Quality Certification has been obtained from the Kentucky Division of Water.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1994 and funds to initiate construction were appropriated in FY 1997.

The scheduled completion date has been changed from September 2003, the latest completion date presented to Congress (FY 2001), to Being Determined.



3 April 2001

119

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Metropolitan Region of Cincinnati, Duck Creek, Ohio (Continuing)

LOCATION: The project encompasses 3.2 miles of stream reach in the City of Cincinnati and the Village of Fairfax, in Hamilton County, Ohio.

DESCRIPTION: The recommended plan consists of 1,200 feet of stream channel relocation; 8,500 feet of streambank protection; 3,300 feet of earth levees; 7,100 feet of concrete floodwalls; 1,100 feet of triple box culvert, widening of one railroad bridge; demolition of one abandoned highway bridge; one pump station for interior drainage; one automated floodgate closure; one emergency access road; one flood emergency warning system; 32.1 acres of permanent easements and 10.0 acres of temporary easements; and environmental mitigation. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1996 and Water Resources Development Act of 2000.

REMAINING BENEFIT-COST RATIO: 1.9 to 1 at 7 3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 7 3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.26 to 1 at 7 3/4 percent (FY 1997).

BASIS OF BENEFIT COST RATIO: Project Design Memorandum for Duck Creek, Ohio, dated January 1996, at January 1996 price levels. An economic update of the Duck Creek, Cincinnati, OH study was completed in September 2000 at October 2000 price levels.

Division: Great Lakes & Ohio River

District: :Louisville

Metropolitan Region of Cincinnati, Duck Creek, OH

3 April 2001

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SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE	
Estimated Federal Cost		\$ 32,123,000	Entire Project	18	Being Determined	
Estimated Non-Federal Cost		4,200,000		PHYSICAL DATA		
Cash Contribution	1,816,000		Levees	3,300 ft.	Access Road	1
Other Costs	2,384,000		Floodwalls	7,100 ft.	Widen R.R. Bridge	1
Total Estimated Project Cost	\$ 36,323,000		Channel Relocation	1,200 ft.	Pump Station	1
			Streambank Protection	8,500 ft.		
			Triple Box Culvert	1,100 ft.		
			Acres of Permanent Easements	32		
			Demolish Highway Bridge	1		
			ACCUM. PCT. OF EST. FED. COST			
Allocations to 30 September 2000		4,395,000				
Conference Allowance for FY 2001		3,024,000				
Allocation for FY 2001		952,000 1/				
Allocations through FY 2001		5,347,000	17			
Allocation Requested for FY 2002		2,700,000	25			
Programmed Balance to Complete after FY 2002		24,076,000	100			
Unprogrammed Balance to Complete after FY 2002			0			

1/ Reflects a reduction of \$484,000 as savings and slippage, \$1,582,000 reprogramming from the project, and \$6,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

Division: Great Lakes & Ohio River

District: :Louisville

Metropolitan Region of Cincinnati, Duck Creek, OH

3 April 2001

121

JUSTIFICATION: Duck Creek suffers from frequent flash flooding affecting roads, utilities, 9 residential properties, and 32 commercial/industrial properties valued at \$62.4 million; threatens over 1,000 jobs in manufacturing; and disrupts production. The most recent out-of-bank flooding causing property damage occurred in June 1997. Threatening flood conditions occurred 5 times in a four-month period during 1991, with plant closures during at least one of these events. The potential for frequent damaging floods and for less frequent but catastrophic flooding exists during any given year. Additional significant flooding occurred in 1982 and 1985. These two floods are estimated to have been a 25-year frequency event and a 10-year frequency event, respectively. A recurrence of these floods would cause damages estimated at \$5.6 million and \$1.2 million, respectively, in 1995 price levels and conditions of development. The recommended plan reduces average annual flood damages by 94 percent. The recommended plan provides a uniform 100 year level of protection for the three protected areas.

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	\$ 3,874,000
Advance Bridge Replacement	64,000
Location	9,000
Total	\$ 3,947,000

FISCAL YEAR 2002: The requested amount will be applied as follows:

Initiate Wildlife Facilities Contract	\$ 75,000
Initiate Phase III Construction Contract	1,472,000
Federal Land Payments	954,000
Continue Planning, Engineering and Design	74,000
Construction Management	100,000
Continue Lands & Damages Federal Administration	25,000
Total	\$ 2,700,000

Division: Great Lakes & Ohio River

District: :Louisville

Metropolitan Region of Cincinnati, Duck Creek, OH

3 April 2001

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NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 and modified by the Water Resources Development Act of 2000, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Const/Reimb	Annual OMRR&R Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	2,302,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	82,000	
Pay approximately 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation. of flood control facilities.	1,816,000	55,000
Total Non-Federal Costs	\$ 4,200,000	\$ 55,000

The non-Federal sponsors have agreed to make all payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsors are the City of Cincinnati, Ohio and the Village of Fairfax, Ohio. The terms of the Project Cooperation Agreement (PCA) have been discussed with each sponsor and each understands its responsibilities. The PCA was executed in December 1997. A PCA amendment to support the new authorized total project cost and maximum non-federal cost is scheduled to be executed in August 2001. In May, 1993, the Cincinnati City Council approved a rate increase by the Cincinnati Stormwater Management Utility that included funds for the city's share of project costs. The Village of Fairfax will fund its share of project costs from either the proceeds of a bond issue or an increase in its earnings tax.

The current non-Federal cost estimate of \$4,200,000, which includes a cash contribution of \$1,816,000, and is a decrease of \$1,437,000 in the last non-Federal cost estimate presented to Congress (FY 2001) of \$5,637,000, which included a cash contribution of \$3,062,000. The new cost estimate reflects the project's modified authorization in Water Resources Development Act of 2000 which capped the non-Federal sponsor's costs.

Division: Great Lakes & Ohio River

District: :Louisville

Metropolitan Region of Cincinnati, Duck Creek, OH

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$32,123,000 is an increase of \$15,210,000 from the latest estimate (\$16,913,000) presented to Congress (FY 2001). The change includes the following items:

Item	Amount
Authorized Modifications	\$14,341,000
Price Escalation on Construction Features	\$ 869,000
Total	\$15,210,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment was conducted and a Finding of No Significant Impact was signed on January 14, 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1994. Funds to initiate construction were appropriated in FY 1997.

The scheduled completion date has been changed from September 2003, the latest completion date presented to Congress (FY 2001), to Being Determined.

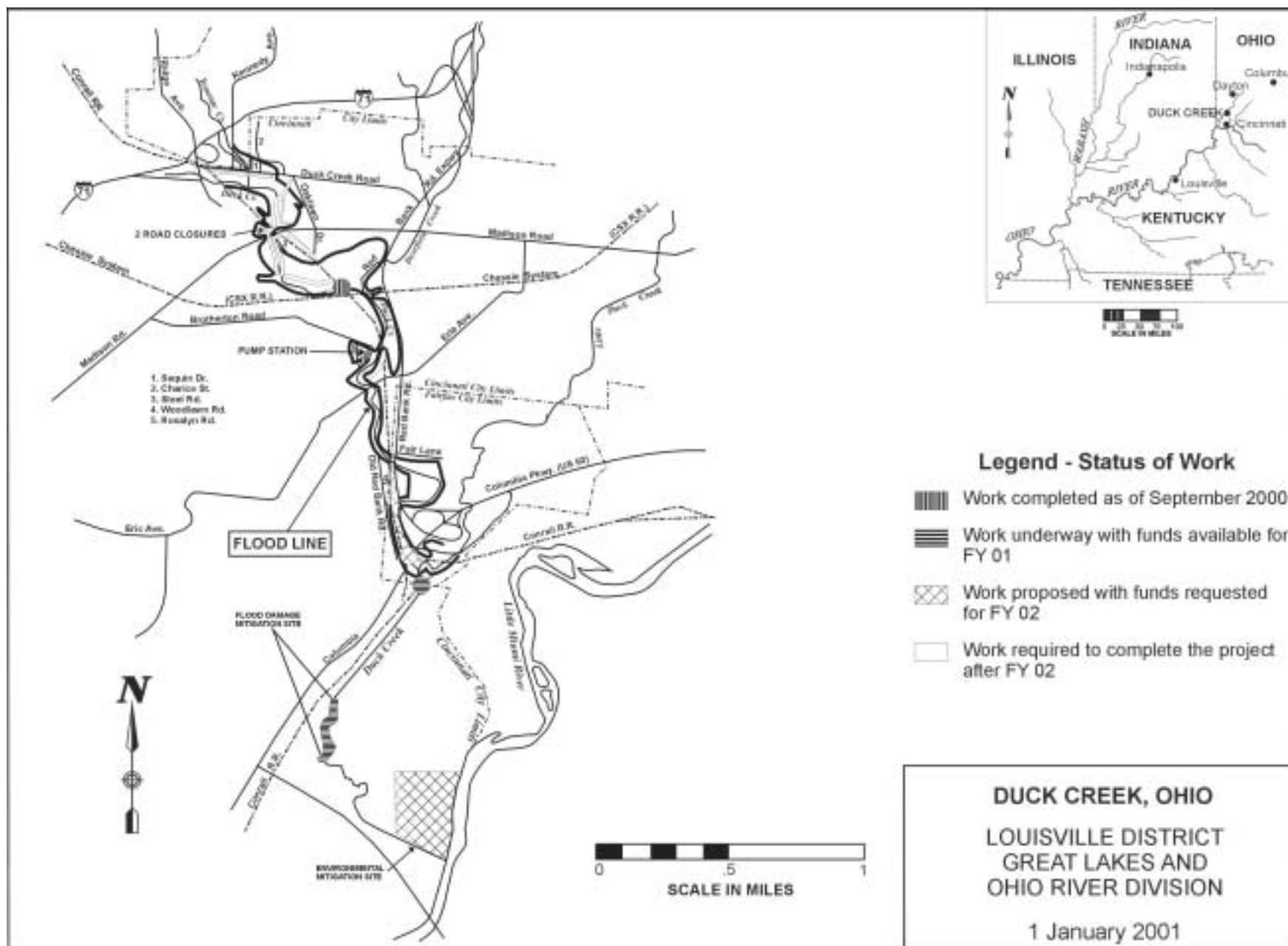
Division: Great Lakes & Ohio River

District: :Louisville

Metropolitan Region of Cincinnati, Duck Creek, OH

3 April 2001

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3 April 2001

125

APPROPRIATION TITLE: Construction, General - Local protection (Flood Control)

PROJECT: Mill Creek, Ohio (Continuing)

LOCATION: The project is located along a 17.5 mile length of Mill Creek in Hamilton County, Ohio, and the 3/4-mile length of East Fork in Hamilton County, Ohio. Lower Mill Creek is in the commercial and industrial heart of the Cincinnati metropolitan area in the southwestern portion of the State.

DESCRIPTION: The project includes 17.5 miles of channel improvement, 2 miles of levees, 3 pumping plants, modification of highway and railroad bridges, and the addition of 2 pumping units at the existing Mill Creek barrier dam. A paved greenbelt within the channel right-of-way will be provided for high-density urban oriented recreational use. Approximately, 6.1 miles of channel improvement and the addition of 2 pumping units at the existing barrier dam have been completed. A General Reevaluation Report and completion of "punch list" items for Section 3 are programmed. All other remaining work is unprogrammed.

AUTHORIZATION: 1970 Flood Control Act

REMAINING BENEFIT-REMAINING COST RATIO: 3.8 to 1 at 5-5/8 percent.

TOTAL BENEFIT-COST RATIO: 3.3 to 1 at 5-5/8 percent.

INITIAL BENEFIT-COST RATIO: 3.2 to 1 at 5-5/8 percent (FY 1975).

BASIS OF BENEFIT-COST RATIO: Design Memorandum No. 3, approved in September 1975 at 1975 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 JAN 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 163,000,000	Entire Project	62	Indefinite
Programmed Construction	\$ 106,261,000				
Unprogrammed Construction	56,739,000				
Estimated Non-Federal Cost		51,210,000			
Programmed Construction	15,843,000		Channel Improvements		17.5 miles
Cash Contribution	\$ 919,000		Levees		2 miles
Other Costs	14,924,000		Pumping Plants		3
Estimated Non-Federal Cost			Relocations:		
Unprogrammed Construction	35,367,000		Railroad Bridges		7
Cash Contributions	4,867,000		Hwy & Road Bridges		17
Other Costs	30,500,000				
Total Estimated Programmed Construction Cost		\$ 121,455,000			
Total Estimated Unprogrammed Construction Cost		92,755,000			
Total Estimated Project Cost		\$ 214,210,000			
Allocations to 30 September 2000		101,042,000	62		
Conference Allowance for FY 2001		500,000			
Allocation for FY 2001		1,619,000 ^{1/}			
Allocations thru FY 2001		102,661,000	63		
Allocation Requested for FY 2002		2,000,000	64		
Programmed Balance to Complete after FY 2002		1,600,000			
Unprogrammed Balance to Complete after FY 2002		56,739,000	100		

^{1/}Reflects a reduction of \$80,000 assigned as savings and slippage, \$1,200,000 reprogrammed to the project, and \$1,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

Division: Great Lakes & Ohio River

District: Louisville

Mill Creek, OH

3 April 2001

127

JUSTIFICATION: The project would protect the Mill Creek Basin from residual flood damages resulting from headwater flooding. On the average, damaging headwater floods occur about twice yearly. As the result of the small size of the Mill Creek drainage area, the basin is potentially subject to severe flooding from any type storm with limited time available for evacuation. The area contains about 3,000 acres of intensively developed land and a broad mix of industrial, commercial, and residential development, and a complex network of transportation facilities including roads, streets, interstate highways, extensive railroad yards, truck and spur lines, and utilities. Large volumes of toxic substances are stored and utilized in the flood plain by manufacturers. Flammable and volatile liquids are also present in the flood plain in large quantities. Flooding creates extreme hazards in the areas of public health, fire, and explosion. The value of property in the flood plain of Hamilton County is about \$2.7 billion (1989 values). About 5,000 persons reside and 20,000 persons are employed in the flood plain. However, the entire population of the metropolitan area of Cincinnati is adversely affected by Mill Creek flooding. The maximum flood of record occurred in March 1913 and the January 1959 flood was the second largest flood of record. A recurrence of the January 1959 flood, under current conditions of development, would cause damages estimated at \$26,661,000 (1992 values). A damaging flood also occurred in September 1979.

The project would provide protection for the developed portions of the Mill Creek flood plain for a flood having a frequency of one or more occurrences every 100 years from the barrier dam (stream mile 0.3) upstream to I-275 (stream mile 18.2). In addition, the project would provide specific-use recreation activities along the length of the Mill Creek main stem in Hamilton County.

Average annual benefits are estimated at \$18,865,000 based on January 1975 price levels.

Annual Benefits	Amount
Flood Control	\$18,295,000
Recreation	570,000
Total	\$18,865,000

FISCAL YEAR 2002: The requested amount will be applied as follows:

Complete General Reevaluation Report	\$ 1,800,000
Continue Section 3 Construction Punch List Items	\$ 200,000
Total	\$ 2,000,000

NON-FEDERAL COSTS: In accordance with cost sharing and financing concepts reflected in the 1970 Flood Control Act, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide all of lands, easements, and right-of-way of flood control facilities.	\$ 16,278,000	
Modify or relocate bridges (except railroad bridges) and utilities where necessary in construction of the project and bear all costs for operation, maintenance and replacement of flood control facilities.	\$ 29,146,000	\$ 120,000
Pay a portion of the cost of the recreation facilities which, when added to the cost of recreation lands, would amount to 50 percent of the separable cost of recreation.	5,786,000	119,000
Total Non-Federal Costs	\$ 51,210,000	\$ 239,000

STATUS OF LOCAL COOPERATION:

The Millcreek Valley Conservancy District is the responsible cooperating agency for all required assurances.

An assurance agreement covering local cooperation requirements for the project consistent with Section 221 of the 1970 Flood Control Act and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 was executed by the Conservancy District on 6 February 1975 and for the Secretary of the Army on 28 March 1975. A recreation cost-sharing contract was executed by the Conservancy District 25 February 1975 and approved for the Secretary of the Army 28 May 1975.

Ohio Department of Natural Resources permits relating to construction of the various sections of the entire Mill Creek project have been either procured or waived.

The authorization-of-entry for Sections 7A, 3, 2, 4A, and 1 were executed by the local sponsor 20 September 1979, 14 December 1981, 20 June 1983, 24 March 1986, and 11 September 1989, respectively.

An Operation and Maintenance Agreement, wherein the Mill Creek Valley Conservancy District assumes responsibility for sections for which "punch list" work has been completed, was executed on 7 August 1998.

A Contributed Funds Memorandum of Agreement, wherein non-Federal public agencies contribute toward the costs of the General Reevaluation Report, was executed on 7 August 1998.

The current non-Federal cost estimate of \$51,210,000 (Oct 92) is an increase of \$30,396,000 over the approved estimate (\$20,814,000 - Oct 74) in the local cooperation agreement. This increase is based on price level adjustments.

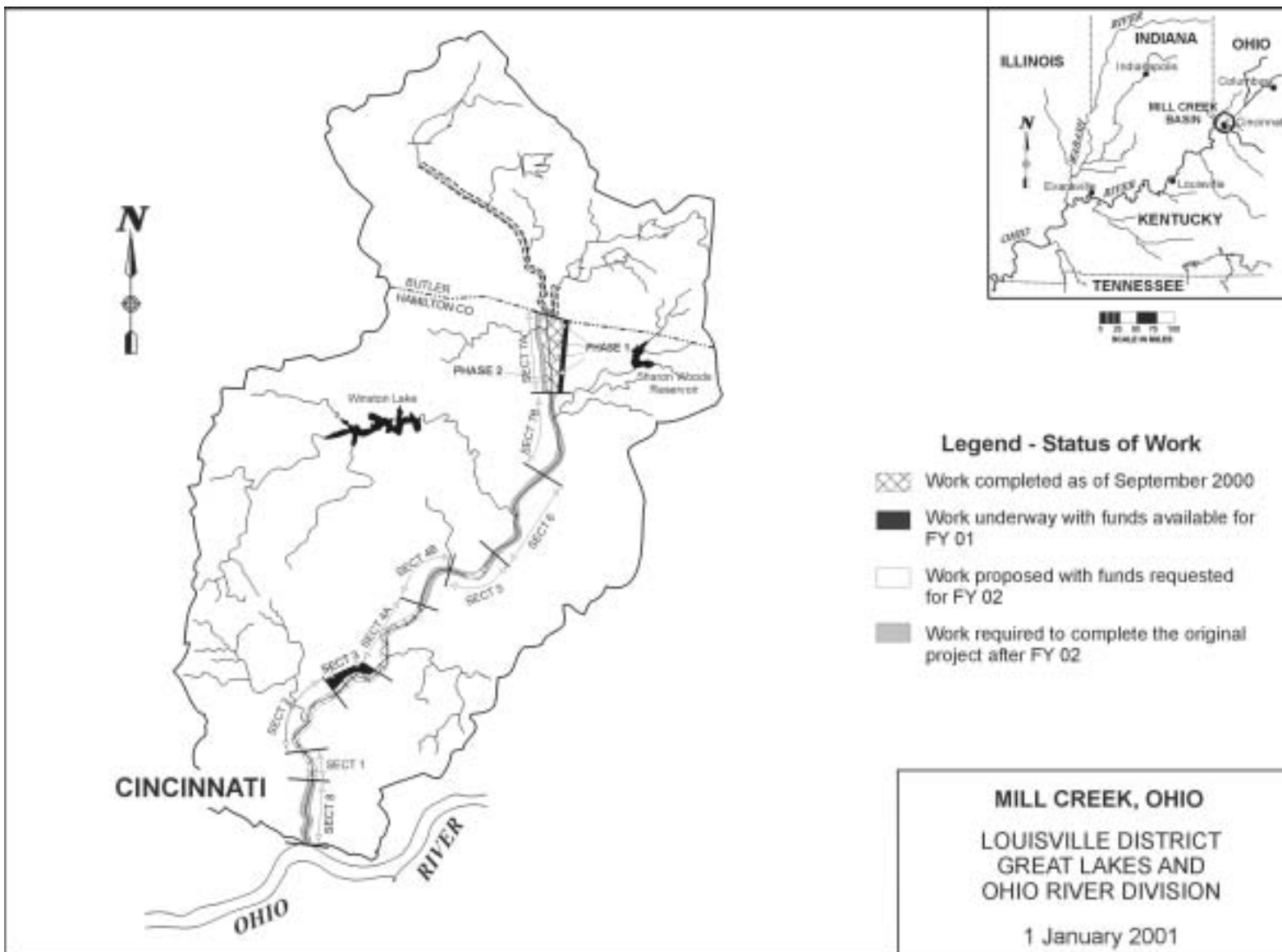
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$163,000,000 is the same as the latest estimate presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement (survey scope) was filed with CEQ on 7 October 1970, and included in the Authorization Report, House Document no 91-413. The final Environmental Impact Statement was filed with CEQ on 17 October 1974.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1972 and funds to initiate construction were appropriated in FY 1975.

The General Reevaluation Report is scheduled for completion in September 2002.

The scheduled physical completion date is Indefinite, the same as last presented to Congress (FY2001).



3 April 2001

131

APPROPRIATION TITLE: Construction, General - Local Protection Project (Flood Control)

PROJECT: West Columbus, Ohio (Continuing)

LOCATION: The project is located in Columbus, Ohio, adjacent to the downtown area, in Franklin County.

DESCRIPTION: The proposed project consists of a 5.2 mile levee/floodwall system; 14 gate closures; interior drainage facilities; two new pump stations; and reworking of two existing pump stations. The protected area contains approximately 1,200 acres and is completely urban with a mix of residential, industrial, and commercial development. The project will provide protection from the standard project flood. All work is programmed.

AUTHORIZATION: The Water Resources Development Act of 1988, as amended by the Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 4.4 to 1 at 8 3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 8 3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8 3/4 percent (FY 1993).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Design Refinement Report, dated August 1997.

SUMMARIZED FINANCIAL DATA

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2001)	PHYSICAL PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost		\$ 97,000,000	Entire Project	64	Being Determined
Estimated Non-Federal Cost		35,000,000	PHYSICAL DATA		
Cash Contributions	6,935,000		Levee and Floodwall: 7.2 miles of levee/floodwall. Heights range from 2 feet to 18 feet. Gate Closures: 14 (1,100 feet) Lands and Damages: 198 acres easement Pump Stations: 2 (120,000 & 80,000 GPM)		
Other Costs	28,065,000				
Total Estimated Project Cost		\$132,000,000			
Allocations to 30 September 2000		\$ 68,536,000			
Conference Allowance for FY 2001		11,000,000			
Allocation for FY 2001		9,218,000	<u>1/</u>		
Allocations through FY 2001		77,754,000	80		
Allocation Requested for FY 2002		\$ 7,200,000	88		
Programmed Balance to Complete after FY2002		12,046,000			
Unprogrammed Balance to Complete after FY2002		0			

1/ Reflects \$1,760,000 reduction assigned as savings and slippage, and \$22,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: The West Columbus area contains a mix of residential, commercial, and industrial development that is subject to flooding. The maximum flood of record occurred in March, 1913, and the second most severe and the most recent flooding at Columbus occurred in January, 1959. A recurrence of these floods would cause damages of \$417,900,000 and \$316,400,000 respectively. The current value of the property subject to flooding is \$540,000,000.

Average annual benefits for the project total \$22,970,000, all of which are for urban flood damage reduction.

Division: Great Lakes & Ohio River

District: Huntington

West Columbus, OH

3 April 2001

133

FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Levee and Floodwall Construction	\$ 6,674,000
Engineering and Design	98,000
Construction Management	428,000
Total	\$ 7,200,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resource Development Act of 1986, the non-federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments during Construction And Reimbursements	Annual Operation, Maintenance, Repair, Replacement, and Rehabilitation
Provide lands, easements, rights of way, and borrow and dredged or excavated material disposal areas.	\$ 5,665,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	22,400,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of recreation facilities.	470,000	
Pay approximately 5 percent of the cost allocated to flood control to bring the total non-Federal share of flood control costs to 26 percent, and bear all costs of operation, maintenance, repair, replacement and rehabilitation of flood control facilities.	6,465,000	\$185,000
Total Non-Federal Costs	\$35,000,000	\$185,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

Division: Great Lakes & Ohio River

District: Huntington

West Columbus, OH

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the city of Columbus, Ohio. A Project Cooperation Agreement with the City was executed in July 1993, and was amended in January 1999 to include the downstream realignment area. The City has provided \$5,335,000 of its cash contribution for the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$97,000,000 is unchanged from the latest estimate (\$97,000,000) presented to Congress (FY 2001).

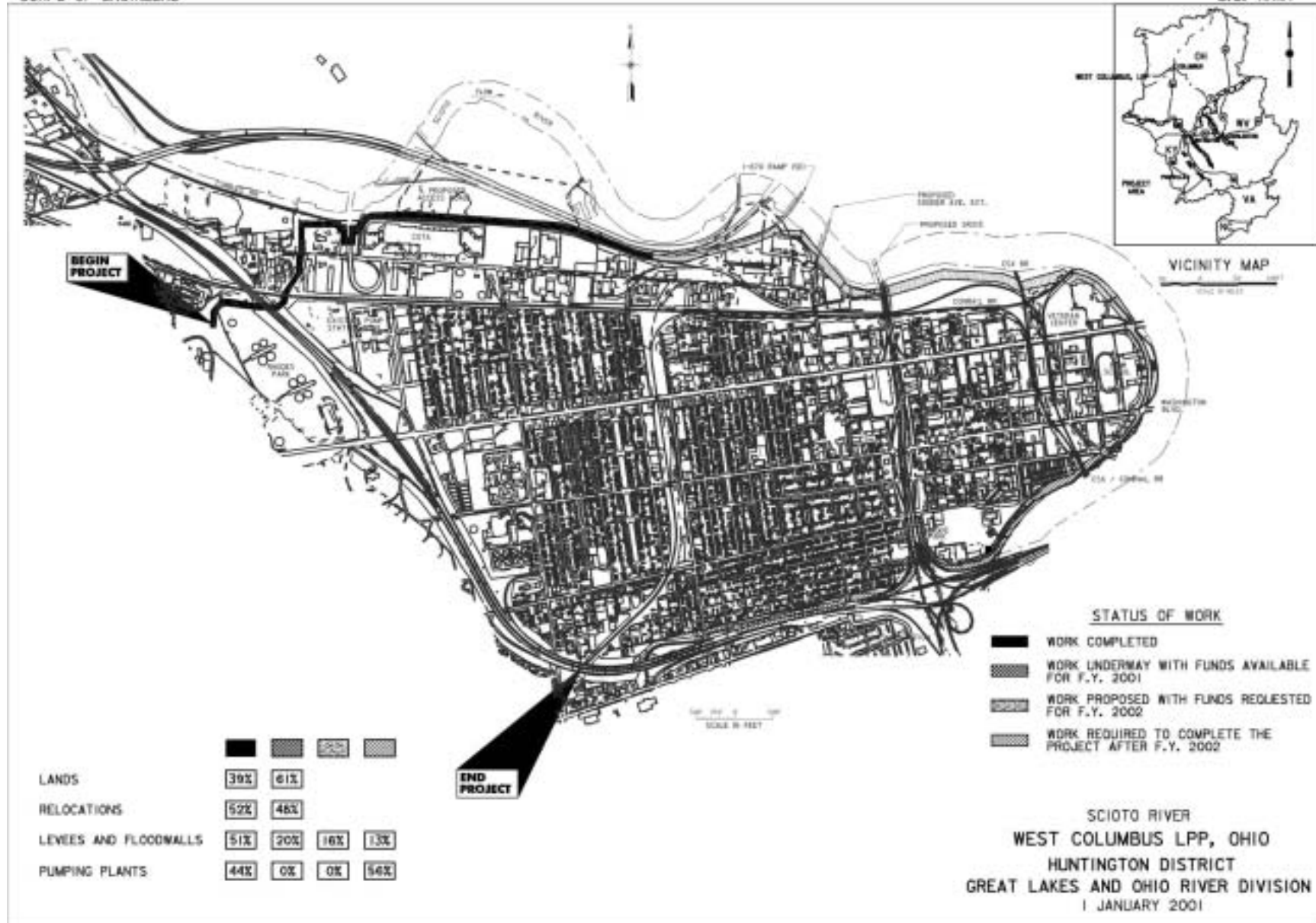
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) were signed in November 1986. A revised EA and FONSI were signed in April 1993.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1989 and funds to initiate construction were appropriated in FY 1993.

Award of the first construction contract, Dry Run Levee Phase IA, occurred in September 1993. A contract with the Ohio Department of Transportation (ODOT) for the construction by ODOT of gate closures at Souder Avenue and S.R. 315 and for modification of the I-670 embankment was executed on March 3, 1994. ODOT will accomplish this work as part of its ongoing highway construction efforts within the project area. The contract for Phase IB of Dry Run levee was awarded in April, 1995. The contract for Phase IIA was awarded in March 1996. The contract for Phase IIB Dodge Park pump station was awarded in May 1996. The contract for Phase IIC was awarded in August 1997. The contract for Phase IID was awarded in July 1998. The contract for Phase IIE was awarded in June 1999. The contract for Phase IIIA (South) was awarded in July 1999. The contract for Phase IIIA (North) was awarded in January 2000. The contract for Phase IIIC was awarded in November 2000.

A new downstream alignment for the project was approved in December 1997 due to engineering necessity.

The scheduled physical completion date has changed from September 2004, the date last submitted to Congress (FY2001), to Being Determined.



3 April 2001

136

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Saw Mill Run, Pittsburgh, Pennsylvania (Continuing)

LOCATION: Saw Mill Run is a tributary to and enters the Ohio River from the left descending bank at River Mile 0.7. The project is located at the mouth of Saw Mill Run in the West End area of the city of Pittsburgh, Pennsylvania in Allegheny County.

DESCRIPTION: The proposed Saw Mill Run Local Flood Protection Project extends 4,700 feet from the stream's mouth. The work consists of channel deepening and realignment, channel paving, streambank stabilization, gravity and retaining walls, utility relocations, and the installation of two upstream flood warning gages. All work is programmed.

AUTHORIZATION: Water Resource Development Act of 1986 (Public Law 99-662), as modified by Water Resources Development Act of 1996.

REMAINING BENEFIT - REMAINING COST RATIO: 1.59 to 1 at 7 3/4 percent.

TOTAL BENEFIT - COST RATIO: 1.16 to 1 at 7 3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.45 to 1 at 7 3/4 (FY 1997)

BASIS OF BENEFIT - COST RATIO: Benefits are from the Saw Mill Run Flood Protection Project General Reevaluation Report, dated January 1994, at October 1993 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 JAN 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$13,374,000	Entire Project	23	Being Determined
Programmed Construction	\$13,374,000				
Unprogrammed Construction					
PHYSICAL DATA					
Estimated Non-Federal Cost		\$ 4,458,000	Common Excavation	67,000 CY	
Programmed Construction	\$ 4,458,000		Rock Excavation	780 CY	
Cash Contributions	\$ 3,328,000		Dredging	1,900 CY	
Other Costs	1,130,000		Compacted Fill	4,300 CY	
			Concrete Gravity Wall	590 CY	
			Post and Panel Walls	1 Job	

Division: Great Lakes & Ohio River

District: Pittsburgh

Saw Mill Run, Pittsburgh, PA

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SUMMARIZED FINANCIAL DATA (continued):

Estimated Non-Federal Cost (continued)

Unprogrammed Construction	0		
Cash Contributions	\$	0	
Other Costs		0	
Total Estimated Programmed Construction		\$17,832,000	
Total Estimated Unprogrammed Construction		0	
Total Estimated Project Cost		\$17,832,000	
			ACCUM. PCT.OF EST. FED.COST
Allocations to 30 September 2000		\$ 2,958,000	
Conference Allowance for FY 2001		\$ 4,300,000	
Allocation for FY 2001		\$ 3,479,000	<u>1/</u>
Allocation through FY 2001		\$ 6,437,000	43
Allocation requested for FY 2002		\$ 4,138,000	82
Programmed Balance to Complete after FY 2002		2,799,000	
Unprogrammed Balance to Complete after FY 2002		0	

1/ Reflects a reduction of \$688,000 for savings and slippage, \$8,000 rescinded in accordance with the Consolidated Appropriations Act, 2001 and \$125,000 reprogrammed from the project.

JUSTIFICATION: Saw Mill Run drains an area of 19.4 square miles in Allegheny County, Pennsylvania, with the lower half of the drainage area located within the Pittsburgh city limits. The topography is hilly and the flood plain is narrow, with about 75 percent of the basin in areas of urban development. The proposed project is designed to protect a combination of residential, commercial and light industrial properties, valued at \$13,200,000, from flooding. The maximum flood of record occurred in 1943, at which time flood damages of approximately \$300,000 (1993 value \$6,000,000) were incurred. Low level flooding has occurred regularly in the drainage area during periods of moderate rain. The project will provide protection from the 20 year flood event. The average annual damages are \$94,000 with the project and \$1,103,000 without the project.

FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Construction	\$ 3,838,000
Continue Planning, Engineering, and Design	50,000
Continue Construction Management	250,000
Total	\$ 4,138,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments during Construction and Reimbursements	Annual Operation, Maintenance, Repair, Replacement, and Rehabilitation Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 860,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	270,000	
Pay approximately 17 percent of the cost allocated to flood control to bring the total non-federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation.	3,328,000	83,000
Total Non-Federal Costs	\$ 4,458,000	\$ 83,000
The non-Federal sponsor will be required to make all payments concurrently with project construction.		

Division: Great Lakes & Ohio River

District: Pittsburgh

Saw Mill Run, Pittsburgh, PA

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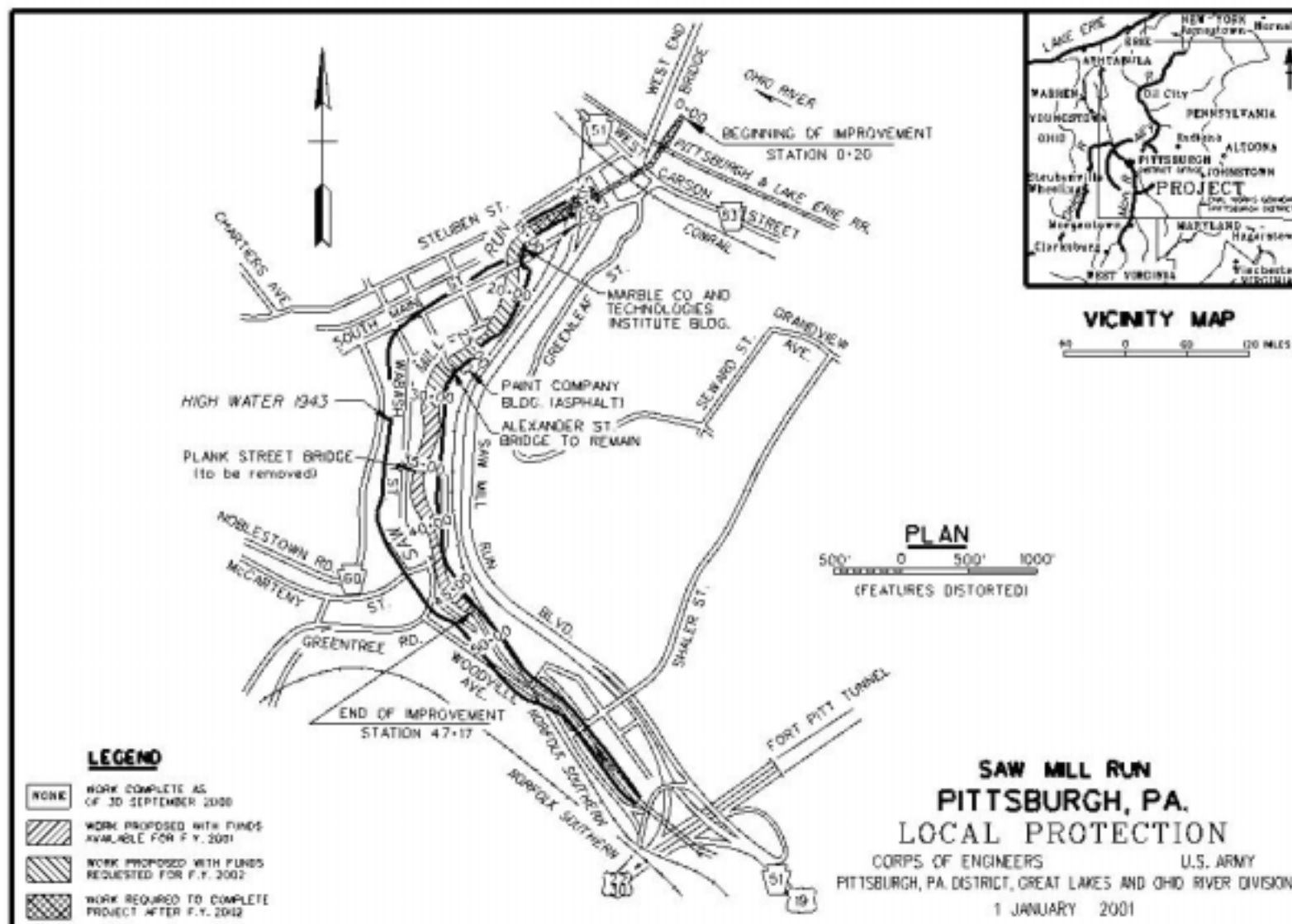
STATUS OF LOCAL COOPERATION: The non-federal cost sharing partner is the city of Pittsburgh, Pennsylvania. By letter dated January 19, 1993, the city expressed its assurance that it would serve as the local sponsor for the project, if funded for construction. The Project Cooperation Agreement was executed in October 1997. Real Estate acquisition, to be done by the Corps for the City of Pittsburgh, was initiated in FY 1998 and completed in FY 2000. The construction contract was awarded in February 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$13,374,00 is an increase of \$2,799,000 over the last estimate (\$10,575,000) presented to Congress. (FY 2001). This change includes the following items:

Item	Amount
Post Contract Award and Other Estimating Adjustments	\$ 2,799,000
Total	\$ 2,799,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was completed during the reevaluation study, and a signed Finding of No Significant Impacts (FONSI) was included in the General Reevaluation Report, dated January, 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1989. Funds to initiate construction were appropriated in FY 1997. The scheduled completion date has been changed from September 2002, the latest completion date presented to Congress (FY 2001), to Being Determined.



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APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, West Virginia, Virginia and Kentucky (Continuing)

LOCATION: The Levisa and Tug Forks are situated in southwestern West Virginia, southeastern Kentucky, and western Virginia and converge at Fort Gay, West Virginia, and Louisa, Kentucky, to form the Big Sandy River. The Levisa Fork Basin encompasses 2,326 square miles. The project area includes the mainstem Levisa Fork from Louisa, Kentucky, to Grundy, Virginia (approximately 100 stream miles excluding Fishtrap Lake), and the mainstem Russell Fork from its confluence with the Levisa Fork, to and including Haysi, Virginia (approximately 31 stream miles). Projects are located in Pike County, Floyd County, Johnson County, and Lawrence County in Kentucky and Buchanan County, Dickenson County in Virginia. The Tug Fork Basin encompasses 1,555 square miles. The project area is comprised of approximately 140 stream miles from Louisa, Kentucky to Welch, West Virginia. Projects are located in Pike County, and Martin County in Kentucky, and Wayne County, Mingo County and McDowell County in West Virginia. The Upper Cumberland River Basin encompasses 1,977 square miles. Approximately 132 stream miles of the Cumberland River from its origin at Harlan, Kentucky, to Cumberland Falls are included in the project area. Projects are located in Harlan County, Knox County, Bell County, and Whitely County in Kentucky.

DESCRIPTION: The project includes levees, floodwalls, pump stations, and a flood control reservoir; the floodproofing and evacuation of structures located in the flood hazard areas; and development of relocation sites for the affected areas. Work is complete at Williamson, West Virginia; Barbourville, Kentucky; South Williamson, Kentucky; and Pineville, Kentucky. Work at Matewan, West Virginia, Hatfield Bottom area of Matewan, West Virginia, Wayne County, West Virginia, McDowell County, West Virginia, Upper and Lower Mingo County, West Virginia, Harlan, Kentucky, Williamsburg, Kentucky, Pike County (Tug Fork), Kentucky, Martin County, Kentucky, Middlesborough, Kentucky, Clover Fork, Kentucky, and Grundy, Virginia are under way with available funds. Detailed Project Reports for Town of Martin, Kentucky, Pike County (Tug Fork) Tributaries, Kentucky, Buchanan County, Virginia, Levisa Fork and Upper Cumberland River Basins, Dickenson County, Virginia, City of Cumberland, Kentucky, Harlan County, Kentucky, and Bell County, Kentucky are under way with available funds. Flood warning systems for the Tug and Levisa basins are complete. The Grundy, Virginia, non-structural project and the Harlan County, Kentucky, Detailed Project Report are programmed. All other work is unprogrammed. (See status and completion schedule).

AUTHORIZATION: The Energy and Water Development Appropriations Act, 1981, and Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: Not Applicable. 1/

TOTAL BENEFIT-COST RATIO: Not Applicable. 1/

INITIAL BENEFIT-COST RATIO: Not Applicable. 1/

BASIS OF BENEFIT-COST RATIO: Not Applicable. 1/

1/ An overall project benefit-cost ratio was not computed because the Congress, in the Energy and Water Development Appropriations Act, 1981, found that the benefits attributable to the flood control measures authorized by the Act exceed their costs.

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost			\$1,932,137,000 <u>2/</u>
Programmed Construction		\$ 816,808,000	
Unprogrammed Construction		1,115,329,000	
Estimated Non-Federal Cost			112,210,000 <u>3/</u>
Programmed Construction		40,134,000	
Cash Contributions	\$ 9,234,000		
Other Costs	30,900,000		
Unprogrammed Construction		72,076,000	
Cash Contributions	72,076,000		
Other Costs	0		

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
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SUMMARIZED FINANCIAL DATA (Continued)

			ACCUM. PCT. OF EST FED. COST
Total Estimated Programmed Construction Cost	856,942,000		
Total Estimated Unprogrammed Construction Cost	1,187,405,000		
Total Estimated Project Cost		2,044,347,000	
Allocations to 30 September 2000		726,213,000 <u>2/</u>	
Conference Allowance for FY 2001		37,100,000	
Allocation for FY 2001		34,784,000 <u>4/</u>	
Allocations through FY 2001		760,997,000	39
Allocation Requested for FY 2002		16,700,000	40
Programmed Balance to Complete after FY 2002		39,111,000	
Unprogrammed Balance to Complete after FY 2002		1,115,329,000	

2/ Includes payment of \$850,000 from the Department of Treasury Judgment Fund for a claim at Matewan, WV.

3/ Does not include the following non-Federal contributions, which are not part of the authorized project cost: Pineville, KY -- \$17,691,000 in costs allocated to the highway portion of an integrated highway/floodwall element constructed in cooperation with the Commonwealth of Kentucky for Pineville & Wallsend, Kentucky.

4/ Reflects \$2,080,000 reduction assigned as savings and slippage, and \$163,000 reprogrammed from the project, and \$73,000 rescinded in accordance with the consolidated Appropriations Act, 2001.

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
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STATUS (1 Jan 2001)	PERCENT COMPLETE	COMPLETION SCHEDULE
<u>Structural Measures</u>		
Pineville, KY	100	
Williamson Area, WV	100	
South Williamson, KY	100	
Barbourville, KY (Cutoff)	100	
Barbourville, KY Levee/Fldwll	100	
Matewan, WV	99	Sept 2001
Harlan, KY	99	Indefinite
Williamsburg, KY	100	
Middlesborough, KY	79	Indefinite
Haysi Dam, VA	0	Indefinite

Levisa Basin Flood Warning System	100	
Tug Basin Flood Warning System	100	

<u>Detailed Project Reports</u>		
Upper Cumberland Basin:		
Harlan, KY	100	
Williamsburg, KY	100	
Middlesborough, KY	100	
Upper Cumberland River Basin	100	
Clover Fork, KY	100	
City of Cumberland, KY	75	Indefinite
Harlan Co., KY	95	Being determined
Bell Co., KY	20	Indefinite
Knox Co., KY	0	Indefinite
Whitley Co., KY	0	Indefinite

STATUS (1 Jan 2001)	PERCENT COMPLETE	COMPLETION SCHEDULE
Levisa Fork Basin:		
Grundy, VA	100	
Levisa Basin/Haysi Dam GPS	100	
Buchanan Co., VA	67	Sept 2001
Town of Martin, KY	99	May 2001
Pike Co. (Levisa Fork), KY	0	Indefinite
Floyd Co., KY	0	Indefinite
Johnson Co., Ky	0	Indefinite
Dickenson Co., VA	33	Sept 2002
Lawrence Co. (Levisa), KY	0	Indefinite
Tug Fork Basin:		
Matewan, WV	100	
South Williamson, KY	100	
Lower Mingo Co., WV	100	
Upper Mingo Co., WV	100	
Pike Co. (Tug Fork), KY	100	
Tug Fork GDM	100	
Matewan, Hatfield Bottom, WV	100	
Martin Co., KY	100	
Wayne Co., WV	100	
McDowell Co., WV	100	
Lower Mingo Co., WV, Tribs	100	
Pike Co., KY, Supplement	50	Sept 2001
Lawrence Co. (Tug Fork), KY	0	Indefinite

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
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Nonstructural Measures

Williamson, WV	100		Middlesborough, KY	92	Indefinite
Matewan, WV	100		Upper Mingo County, WV	88	Indefinite
Pineville, KY	100		Levisa Basin, VA & KY	0	Indefinite
South Williamson, KY	100		Grundy, VA	15	Being Determined
Barbourville, KY	100		Martin County, KY	40	Indefinite
Matewan, Hatfield Bottom, WV	99	Indefinite	Wayne County, WV	50	Indefinite
Williamsburg, KY	88	Indefinite	McDowell County, WV	5	Indefinite
Harlan, KY	95	Indefinite	Clover Fork, KY	1	Indefinite
Lower Mingo Co., WV	88	Indefinite	Town of Martin	0	Indefinite
Pike County, KY (Tug Fork)	90	Indefinite			

PHYSICAL DATA			
WILLIAMSON AREA Williamson CBD	Floodwall: Height - 22 ft. avg. Length - 3,900 ft. Pump Stations 2 ea. 30,000 and 70,000 GPM	Lands and Damages: Acres: 18.24 fee 5.76 easement Type – Urban	Relocations: Railroad, highways, city and public utilities
WILLIAMSON AREA West Williamson	Floodwall: Height - 17 ft. avg. Length - 6,237 ft. Pump stations: 1 ea. @ 40,000 GPM	Lands and Damages: Acres: 25.72 fee 31.03 easement Type – Urban	Relocations: Railroad, highways, city and public utilities
WILLIAMSON AREA Snagging and Clearing	N/A	Lands and Damages: Acres: 86.62 easement Type – Riverbank	N/A

PHYSICAL DATA (continued)

MATEWAN	Floodwall/fill: Height - 13 ft. avg. Length - 2,500 ft. Pump stations: 1 ea. @ 18,000 GPM	Lands and Damages: Acres: 45.41 fee 48.88 easement	Relocations: Highway 49 and bridge, Route 9, fire station, town hall and utilities
SOUTH WILLIAMSON	Floodwall: Height - 21 ft. avg. Length - 2,700 ft. Pump Stations: 1 ea. @ 12,000 GPM	Lands and Damages: Acres: 21.52 fee 5.46 easement Type – Residential	Relocations: School cafeteria, highways, county and public utilities
PINEVILLE	Floodwall/Levee/Highway Height - 25 ft. avg. Length - 7,800 ft. Wallsend Levee Height - 25 ft. avg. Length - 4,300 ft.	Lands and Damages: Acres: 118 Type – Urban	Relocations: Wallsend Bridge, Pine Street Bridge
BARBOURVILLE Cutoff	High Flow Diversion Width - 150 ft. Depth - 40 ft. max. Length - 5,000 ft.	Lands and Damages: Acres: 96 Type – Agricultural	Relocations: Tye Bend Rd Bridge
BARBOURVILLE Levee/Floodwall	Levee/Floodwall Height - 26 ft. avg. Length - 19,536 ft.	Lands and Damages: Acres: 144 Type – Urban	Relocations: Highway 459 Bridge

PHYSICAL DATA (continued)

HARLAN (Phase I) Harlan Tunnels	Diversion Tunnels Length - 4 ea @ 2000 ft.	Lands and Damages: Acres: 12 Type – Urban	Relocations: KY Hwy 38 Bridge KY Hwy 72 Bridge
HARLAN (Phase II) Harlan Floodwall	Floodwall/Levee Length - 4,875 ft Height - 24 ft	Lands and Damages: Acres: 16 Type – Urban	Relocations: KY Hwy 11
HARLAN (Phase III) Loyall/Rio Vista Diversion/Levee/Floodwall	Diversion Width - 120 ft channel Depth - 300 ft. max. Length - 3,800 ft. Levee/Floodwall Height - 24 ft. Length - 8,600 ft.	Lands and Damages: Acres: 225 Type – Urban	Relocations: KY Hwy 840 Bridge Park Drive Bridge Highway 413 CSX Railway
WILLIAMSBURG	Levee/Floodwall Height - 15 ft. avg. Length - 4,800 ft.	Lands and Damages: Acres: 23 Type – Urban	Relocations: Public utilities
MIDDLESBOROUGH	Channel Length - 5.2 mi.	Lands and Damages: Acres: 132	Relocations: Public utilities

PHYSICAL DATA (continued)			
HAYSI DAM	Concrete Arch Dam: Height - 202 ft. Length - 825 ft. Spillway: Type – Ogee Weir Length - 170 ft. Discharge - 151,000 cfs Reservoir: Flood Control 28,400 ac.ft. Conservation 8,870 ac.ft. Total 37,270 ac.ft.	Lands and Damages: Acres: 8,335 fee Type - Rural residential and subsistence farms Improvements- Predominantly farm buildings/residential	Relocations: Virginia Secondary Hwy. 609 Public utilities
NON STRUCTURAL	Primarily voluntary relocations from flood prone areas and floodproofing of unprotected development suitable for such measures. Specific physical data determined during preparation of project reports for each individual project.		
DETAILED PROJECT REPORTS	Detailed project reports that currently are under way for other locations in the authorized project area will be continued or completed.		

JUSTIFICATION:

Tug Fork - Historically, repeated flooding in the Tug Fork Valley has brought extensive damage to homes and other developments. During the past 38 years, major floods occurred in January, 1957, March, 1963, March, 1967, April, 1977, and May, 1984. The 1977 flood was the flood of record along much of the Tug Fork. This devastating flood caused valley-wide damages approaching \$200 million at 1977 price levels. Six hundred homes were totally destroyed and 4,700 homes were flooded. Physical losses from direct damage to non-residential buildings and contents exceeded \$41 million. Over half of all damages occurred in Mingo County, West Virginia. Pike County, Kentucky had about \$45 million in damages. The May, 1984 flood resulted in an estimated \$117 million in damages along the Tug Fork. As in previous floods, the extensive bituminous coal mining industry of the basin was disrupted due to direct damage, interrupted transportation, and lost time because of diversions of the work force to flood fighting and cleanup.

Levisa Fork - The same repeated flooding characteristic of the Tug Fork has plagued the Levisa Fork area. During the April, 1977 flood, damages amounted to approximately \$93 million at 1977 price levels. The May, 1984 flood caused an additional \$90 million in losses along the mainstem of the Levisa Fork and its primary upstream tributary, Russell Fork. Impacts on residential properties, commercial and transportation facilities, and the mining industry were similar to those described in the Tug Fork areas.

Upper Cumberland - Flooding continues to bring recurring damage to the Upper Cumberland area. Total damages in all categories amounted to \$34.7 million for this area during the April, 1977 event. The Pineville element protects about 185 acres of urban land containing structures valued at \$25.7 million. At Barboursville, the existing project was sandbagged during the April, 1977 flood event, preventing major losses to some 700 acres of urban land containing structures valued at \$52.4 million. The currently unprotected area is a mix of agriculture and urban land and contains structures valued at over \$6.0 million. During the 1977 flood, no area of Harlan County escaped damage, and four persons drowned and approximately 1,800 persons were left homeless. Total flood damage and associated costs came to almost \$31 million.

The following counties qualify as areas of "substantial and persistent" unemployment: West Virginia - Mingo, McDowell, Wayne; Kentucky - Martin, Pike, Lawrence, Floyd, Johnson, Bell, Harlan, Knox, Whitley; Virginia - Dickenson.

FISCAL YEAR 2002: The requested amount will be applied as follows:

Non Structural Measures

Grundy, Virginia	
Continue Land Acquisition	\$ 800,000
Continue Relocations	600,000
Engineering and Design	550,000
Construction	13,300,000
S & A	650,000
Voluntary Floodproofing & Acquisition	200,000
Subtotal	\$16,100,000
Detailed Project Reports	
Nashville District - Harlan County, KY	\$ 600,000
Subtotal	\$ 600,000
Total	\$16,700,000

PROJECT COSTS: Project elements under construction on 30 April 1986 are exempted from construction cost sharing in accordance with the Water Resources Development Act of 1986. These elements are Williamson Area, West Virginia; South Williamson, Kentucky; Matewan, West Virginia; and Pineville, Kentucky. The Harlan and Barbourville elements were exempted from construction cost sharing by Title I, Section 103 of Water Resources Development Act of 1986. The Hatfield Bottom area of Matewan, West Virginia, was included in the Matewan, West Virginia, element area by the Energy and Water Development Appropriations Act, 1991, Public Law 101-514, and as such, is exempt from cost sharing.

Construction cost sharing is required for all other elements in accordance with the Water Resources Development Act of 1986. The sponsor of each project element for which construction is initiated after 30 April 1986 must provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas; modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the element; pay a cash contribution of no less than 5 percent of the costs allocated to structural flood control to bring the total non-Federal share of structural flood control costs to 25 percent; and bear 25 percent of non-structural flood control costs, including the value of real estate interests and relocations contributed by the sponsor. In accordance with Section 103(m) of the Act, these requirements are subject to the ability of the non-Federal sponsor to pay.

In accordance with Section 202, Energy and Water Development Appropriations Act, 1981 and Public Law 99-662, non-Federal interests must bear all costs of operation, maintenance, and replacement of completed facilities.

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
and Upper Cumberland River, WV, VA and KY

FEDERAL COSTS:

Project Element	Payments During Construction and Reimbursements (Funded/Programmed Work)	Payments During Construction and Reimbursements (Unprogrammed Work)	Annual Operation, Maintenance, and Replacement Costs
Williamson Area, WV	\$105,734,000	\$ 0	\$ 0
Williamson Area, WV NS	23,792,000	0	0
Matewan, WV	57,310,000	0	0
Matewan, WV NS	10,129,000	0	0
Hatfld Bottom, Matewan, WV	8,300,000	0	0
South Williamson, KY	25,854,000	0	0
South Williamson, KY NS	28,063,000	0	0
Pineville, KY	48,406,000	0	0
Pineville, KY NS	4,011,000	10	0
Barbourville, KY	32,019,000	100	0
Barbourville, KY NS	4,191,000	200	0
Harlan, KY	159,136,000	1,164,000	0
Harlan, KY NS	17,072,000	4,228,000	0
Grundy, VA NS	74,100,000	0	0
Lower Mingo County, WV NS	42,597,000	2,503,000	0
Williamsburg, KY	18,687,000	1,643,000	0
Williamsburg, KY NS	1,610,000	100	0
Pike County, KY NS	28,188,000	1,012,000	0
Upper Mingo County, WV NS	12,943,000	1,830,000	0
Middlesborough, KY	29,745,000	0	0
Middlesborough, KY NS	1,605,000	0	0
Clover Fork, KY NS	7,862,000	24,248,000	0
City of Cumberland	3,700,000	24,800,000	0
Martin County, KY NS	14,490,000	23,610,000	0
Wayne County, WV NS	4,982,000	5,415,000	0
Haysi Dam, VA & KY	82,000	129,288,000	0
Levisa Basin, VA & KY NS	0	612,099,000	0
McDowell County, WV NS	11,326,000	167,844,000	0
Levisa Fk Flood Warning Syst	400,000	0	0
Tug Fk Flood Warning Syst	400,000	0	0
Town of Martin, KY NS	700,000	89,442,000	0

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
and Upper Cumberland River, WV, VA and KY

FEDERAL COSTS (continued):	Payments During Construction and Reimbursements (Funded/Programmed Work)	Payments During Construction and Reimbursements (Unprogrammed Work)	Annual Operation, Maintenance, and Replacement Costs
Project Element			
Other costs <u>1/</u>	<u>39,374,000</u>	<u>26,202,590</u>	<u>0</u>
Total Federal Cost <u>1/</u>	\$ 816,808,000	\$ 1,115,329,000	\$ 0

1/ Pre-WRDA 86 costs plus costs for unapproved reports, which will be included in project costs upon report approval.

NON-FEDERAL COSTS:	Payments During Construction and Reimbursements (Funded/Programmed Work)	Payments During Construction and Reimbursements (Unprogrammed Work)	Annual Operation, Maintenance, and Replacement Costs
Project Element			
Williamson Area, WV	\$ 0	\$ 0	\$71,000
Williamson Area, WV NS	0	0	0
Matewan, WV	76,000	0	30,000
Matewan, WV NS	0	0	0
Hatfld Bottom, Matewan, WV	0	0	
South Williamson, KY	0	0	8,000
South Williamson, KY NS	0	0	0
Pineville, KY	0	0	20,000
Pineville, KY NS	0	0	0
Barbourville, KY	0	0	20,000
Barbourville, KY NS	0	0	0
Harlan, KY	0	0	0
Harlan, KY NS	0	0	20,000
Grundy, VA NS	30,900,000	0	21,500
Lower Mingo County, WV NS	2,243,000	130,000	0
Williamsburg, KY	985,000	85,000	20,000
Williamsburg, KY NS	85,000	5,000	0
Pike County, KY NS	1,484,000	56,000	0
Upper Mingo County, WV NS	666,000	111,000	0

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
and Upper Cumberland River, WV, VA and KY

NON-FEDERAL COSTS (continued):			
Project Element	Payments During Construction and Reimbursements (Funded/Programmed Work)	Payments During Construction and Reimbursements (Unprogrammed Work)	Annual Operation, Maintenance, and Replacement Costs
Middlesborough, KY	1,565,000	0	27,000
Middlesborough, KY NS	85,000	0	0
Clover Fork, KY NS	415,000	1,275,000	0
City of Cumberland	0	1,500,000	0
Martin County, KY NS	755,000	1,245,000	0
Wayne County, WV NS	263,000	283,000	0
Haysi Dam, VA & KY	0	12,198,000	486,400
Levisa Basin, VA & KY NS	0	41,584,000	0
McDowell County, WV NS	534,000	8,896,000	0
Levisa Fk Flood Warning Syst	21,000	0	0
Tug Fk Flood Warning Syst	21,000	0	0
Town of Martin, KY NS	36,000	4,708,000	
Other costs	<u>0</u>	<u>0</u>	<u>0</u>
Total Non-Federal Cost	\$ 40,134,000	\$72,076,000	\$723,900

STATUS OF LOCAL COOPERATION:

The City of Barbourville, Kentucky signed a Section 221 Agreement for the Barbourville element on February 14, 1984, to become project sponsor for operation and maintenance after construction is complete.

The City of Pineville, Kentucky signed a Section 221 Agreement for the Pineville element on February 19, 1983, to become project sponsor for operation and maintenance. The Corps and the Commonwealth of Kentucky executed a cost-sharing arrangement for construction of the four-lane highway portion of the project.

The County of Harlan, Kentucky signed a Section 221 Agreement on October 20, 1988, to become project sponsor for operation and maintenance after construction is complete.

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
and Upper Cumberland River, WV, VA and KY

STATUS OF LOCAL COOPERATION (continued):

Mingo County, West Virginia, signed a Section 221 Agreement on March 2, 1983, agreeing to operate and maintain features of the project within its jurisdiction. The City of Williamson, Town of Matewan and Mingo County entered into a sub-agreement transferring certain responsibilities to the City.

Pike County, Kentucky, signed a Section 221 Agreement on August 1, 1983, agreeing to act as non-Federal sponsor for features of the project within its jurisdiction.

A Project Cooperation Agreement for the Lower Mingo County, West Virginia, element was executed on November 17, 1992, with the Mingo County Commission.

A Project Cooperation Agreement for the Williamsburg, Kentucky element was executed on March 10, 1995, with the City of Williamsburg, Kentucky.

A Project Cooperation Agreement for the Pike County, Kentucky element was executed on October 14, 1994, with the Pike County Kentucky Fiscal Court.

A Project Cooperation Agreement for the Upper Mingo County, West Virginia element was executed on December 20, 1995, with the Mingo County, West Virginia Commission.

A Project Cooperation Agreement for the Middlesborough, Kentucky element was executed on January 18, 1996 with the City of Middlesborough, Kentucky.

A Project Cooperation Agreement for the Martin County, Kentucky element was executed on April 21, 1997 with the Martin County Fiscal Court.

A Project Cooperation Agreement for the Wayne County, West Virginia element was executed in April 1998 with the Wayne County Commission.

A Project Cooperation Agreement for the Grundy, Virginia nonstructural element was executed in August 1998 with the Town of Grundy, Virginia and the Virginia Department of Transportation (VDOT).

A Supplement to the Project Cooperation Agreement to add the Mingo County Tributaries to the Upper Mingo County West Virginia element was executed in June 1999 with the Mingo County Commission.

A Project Cooperation Agreement for the McDowell County, West Virginia element was executed in September 1999 with the McDowell County Commission.

A Project Cooperation Agreement for the Clover Fork, Kentucky element was executed on April 13, 2000 with Harlan County, Kentucky.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$1,932,137,000 is an increase of \$78,371,000 from the latest estimate (\$1,853,766,000) presented to Congress (FY 2000). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	\$ 16,352,000
Authorized Modifications	1,460,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	9,681,000
Price Escalation on Real Estate	25,103,000
Added City of Cumberland	25,775,000
Total	\$ 78,371,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Tug Fork - The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on December 3, 1982.

Pineville - The final EIS was filed with EPA on December 22, 1982.

Barbourville - The Finding of No Significant Impact (FONSI) was signed on February 1, 1984.

Harlan - The final EIS was filed with EPA on April 22, 1988. The Record of Decision was signed on August 8, 1988.

Williamsburg - The FONSI was signed on May 19, 1994.

Middlesborough - The FONSI was signed on June 9, 1995.

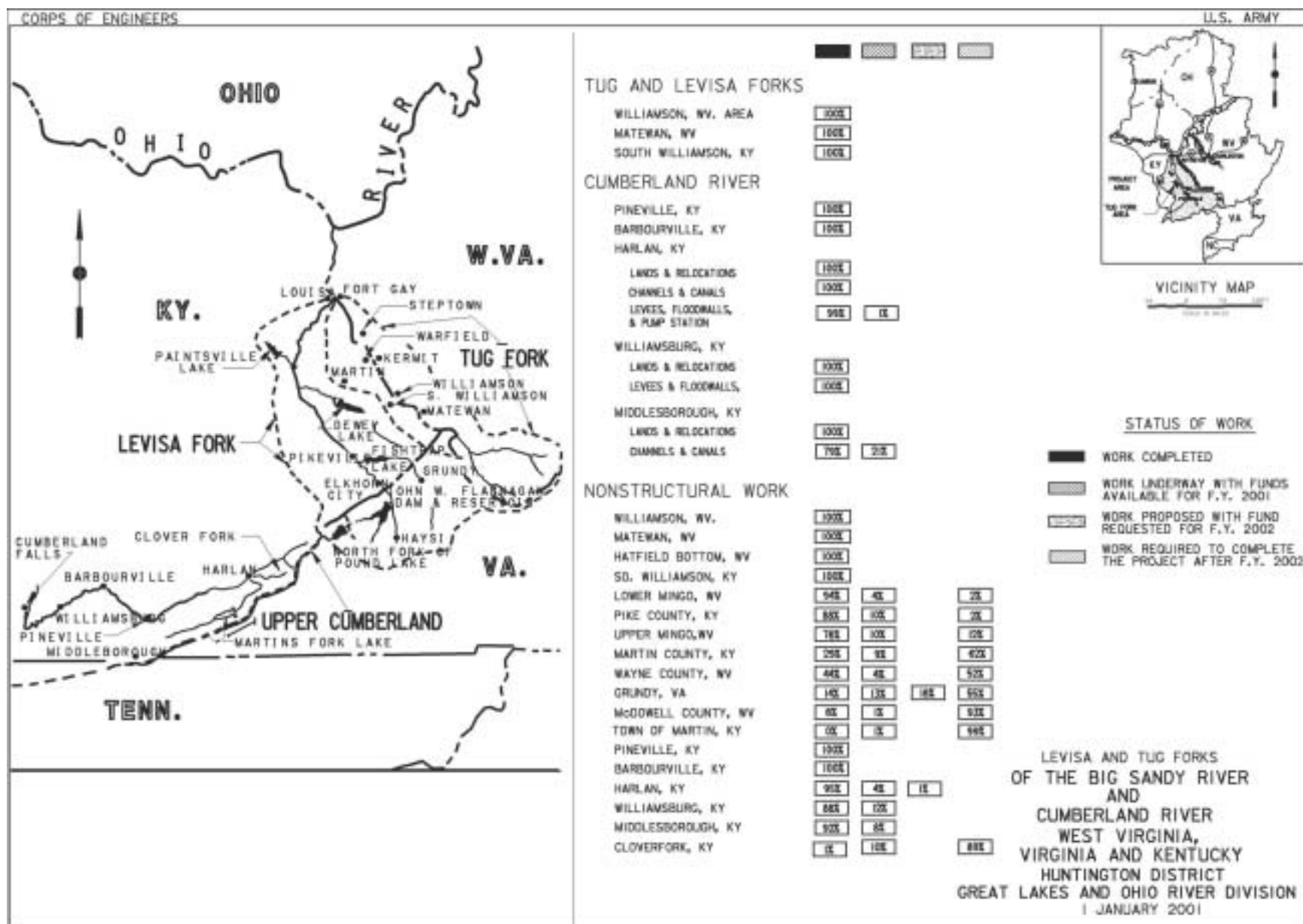
Detailed Project Reports - EIS's for other areas will be scheduled as studies proceed.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1981. The Urgent Supplemental Appropriations Act, 1984 (Public Law 98-332) provided \$21,000,000 for nonstructural measures at this project.

The scheduled completion date of September 2001 for programmed work at Matewan, WV is a change from the latest completion date of September 2000 (FY 2001) presented to Congress. This change is because the project requires completion of property transfers.

The scheduled completion dates last presented to Congress (FY 2001) of September 2006 for the Grundy non-structural project, has been changed to Being Determined.

The scheduled completion date for the Harlan County Detailed Project Report has changed to Being Determined.



3 April 2001

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APPROPRIATION TITLE: Construction, General – Major Rehabilitation (Flood Control)

PROJECT: Mississinewa Lake, Indiana (Major Rehabilitation) (Continuing)

LOCATION: The project is located on the Mississinewa River, a tributary of the Wabash River, in Wabash, Miami, and Grant Counties in north central Indiana. The lake is located approximately 65 air miles north of Indianapolis, Indiana.

DESCRIPTION: The project will provide for increased stability of the dam by constructing a concrete cut-off wall in 2,600 feet of embankment to a depth ranging from 150 to 180 feet penetrating 5 feet into the rock foundation. The cut-off wall will prevent further loss of the embankment or over burden foundation materials into the untreated rock foundation and restore the project to full operational capability. The existing reservoir was constructed to reduce flood damages downstream of the project within the upper Wabash River Basin, and was placed in operation in October 1967. The dam is earth fill and is 8,000 feet long and 140 feet high. The top elevation of the dam is 797 feet msl. Maximum flood control storage capacity is 368,400 acre-feet.

AUTHORIZATION: Flood Control Act of 1958.

REMAINING BENEFIT-COST RATIO: 2 to 1 at 6 7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 6 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.9 to 1 at 6 7/8 percent (FY 2001).

BASIS OF BENEFIT COST RATIO: Mississinewa Dam Major Rehabilitation Report, dated May 2000 with July update.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$ 46,619,000	Entire Project	0	Being Determined
Estimated Non-Federal Cost	0	PHYSICAL DATA		
Cash Contribution	0	Dam: Length - 8,000 ft, Height - 140 ft Drainage Area 809 sq mi Flood Pool 779 ft (12,830 acres) Winter Pool 712 ft (1,280 acres) Summer Pool 737 ft (3,180 acres)		
Other Costs	0			
Total Estimated Project Cost	\$46,619,000			
		ACCUM. PCT. OF EST. FED. COST		
Allocations to 30 September 2000	0			
Conference Allowance for FY 2001	0			
Allocation for FY 2001	2,080,000			
Allocations through FY 2001	2,080,000	1/	5	
Allocation Requested for FY 2002	8,500,000	23		
Programmed Balance to Complete after FY 2002	36,039,000	100		
Unprogrammed Balance to Complete after FY 2002	0			

1/ Reflects \$2,080,000 from the Dam Safety/Assurance/Seepage/Static Instability Wedge fund to complete design and initiate the construction contract.

JUSTIFICATION: The Mississinewa Lake Project was completed in October 1967. During the latter stages of construction in late 1966, a boil was discovered at the toe of the dam. Remedial actions were taken and the boil area was stabilized. Lateral drains were installed and the seepage was thought to be eliminated. In April 1988, settlement of roadway guardrail and the road across the top of the dam first appeared. A monitoring program was effected and has continued to the present. Recent subsurface investigations have revealed an 0.8 foot settlement of a portion of the dam. In May 1999, monitoring wells on the dam revealed that downward stresses are actively compressing the embankment in the area of the settlement and threatening the integrity of the structure. The dam itself remains stable at this time, however, the settlement is continuing which may lead to fissures and possible dam failure. The project includes the placement of a concrete cut-off wall from station 25 + 00 to 51 + 00 for a total of 2,600 feet along the full right embankment. It will extend to depths ranging from 150 to 180 feet, penetrating 5 feet into the rock foundation.

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	\$ 7,156,000
Recreation	\$ 1,066,000
Total	\$ 8,222,000

FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Construction Contract	\$ 7,906,000
Planning, Engineering, and Design	\$ 40,000
Construction Management	\$ 554,000
Total	\$ 8,500,000

NON-FEDERAL COSTS: Funding for this project will be 100% Federal responsibility.

STATUS OF LOCAL COOPERATION: None

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$46,619,000 is the initial estimate presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The proposed action consists of a repair to an existing operating project. An environmental Assessment has been completed and a Finding of No Significant Impact was signed by the District Engineer 14 Mar 2000. An Environmental Impact statement is not required.

Division: Great Lakes & Ohio River

District: Louisville

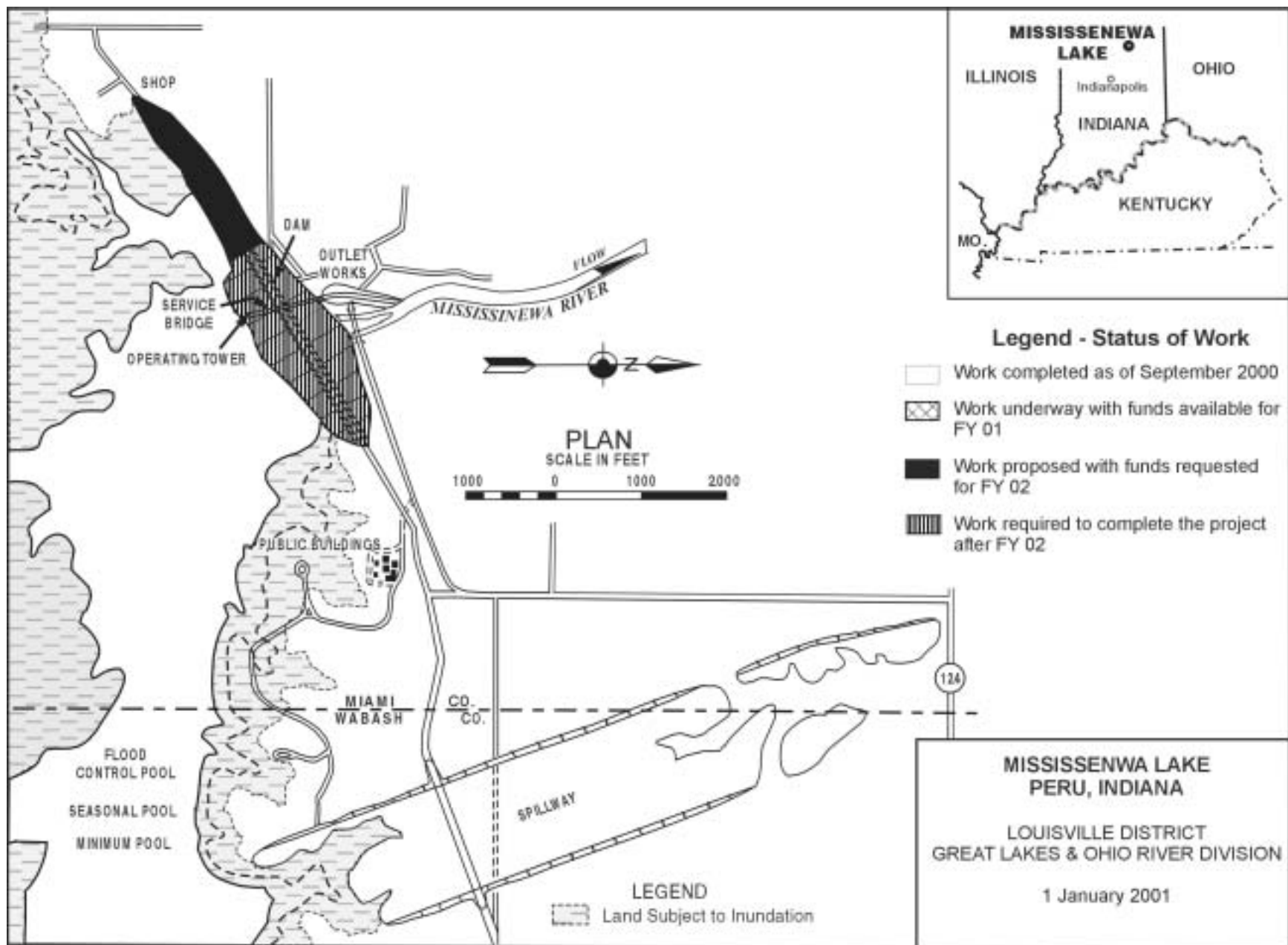
Mississnewa Lake, IN
(Major Rehabilitation)

3 April 2001

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OTHER INFORMATION: Funds to initiate construction were provided in FY 2001. The Mississinewa Lake Dam Safety/Major Rehabilitation Report was approved by ASA(CW) 05 Jan 2001.

The scheduled physical completion date is Being Determined.



3 April 2001

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance (Flood Control)

PROJECT: Dewey Lake, Kentucky (Dam Safety Assurance) (Continuing)

LOCATION: The project is located in Floyd County, Kentucky, on Johns Creek of Levisa Fork, a tributary of the Big Sandy River, 79.4 miles above the mouth of the Big Sandy River.

DESCRIPTION: The dam safety assurance project for Dewey Lake involves raising the effective height of the main dike with compacted earth; adding a 125-foot wide auxiliary spillway; and restricting the existing spillway to its original design capacity by providing vertical restriction walls on each side. The existing project was completed in 1949.

AUTHORIZATION: Flood Control Act of 1938.

REMAINING BENEFIT-REMAINING COST RATIO: Not Applicable.

TOTAL BENEFIT-COST RATIO: Not Applicable.

INITIAL BENEFIT-COST RATIO: Not Applicable.

BASIS OF BENEFIT-COST RATIO: Not Applicable.

SUMMARIZED FINANCIAL DATA

	Original Project
Actual Federal Cost	\$7,845,547
Actual Non-Federal Cost	0
Total Actual Original Project Cost	\$7,845,547

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Project Modification			Project Modification	70	Being Determined
Estimated Federal Cost	\$17,000,000		PHYSICAL DATA		
Estimated Non-Federal Cost	0		Raise the main dike (Brandykeg Dike) approximately three feet with compacted earth; add an auxiliary spillway with a crest elevation of 688.0; and provide vertical restriction walls on the existing spillway to restrict discharge to design capacity.		
Total Estimated Modification Cost	\$17,000,000				
Total Estimated Project Cost	\$ 24,845,547				
Allocations to 30 September 2000	\$ 4,816,000				
Conference Allowance for FY 2001	3,832,000				
Allocation for FY 2001	5,992,000	1/			
Allocations through FY 2001	10,808,000	64			
Allocation Requested for FY 2002	2,900,000	81			
Programmed Balance to Complete after FY 2002	3,292,000				
Unprogrammed Balance to Complete after FY 2002	0				

1/ Reflects \$613,000 reduction assigned as savings and slippage, \$2,781,000 reprogrammed to the project, and \$8,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: According to current engineering criteria, spillway capacities at Dewey Lake are inadequate. The ability of the dam to resist failure when overtopped is of particular concern. Hydrology and hydraulic studies show that failure of the 118-foot high Dewey Lake Dam could result in a major catastrophe. The project is constructed of rolled earth fill with a central impervious core and has a maximum crest length of 913 feet. According to current engineering studies, the dam could only contain 61 percent of the probable maximum flood, the largest flood that could be reasonable expected. Such a situation leads to an extremely high risk of dam failure.

Division: Great Lakes & Ohio River

District: Huntington

Dewey Lake, KY
(Dam Safety Assurance)

3 April 2001

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FISCAL YEAR 2002: The requested funds will be applied as follows:

Continue Dam Safety Construction	\$ 2,450,000
Planning, Engineering and Design	200,000
Construction Management	250,000
Total	\$ 2,900,000

NON-FEDERAL COSTS: None. The dam safety assurance modification is being performed at full Federal expense.

STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$17,000,000 for the dam safety assurance modification is an increase of \$2,300,000 from the latest estimate (\$14,700,000) presented to Congress (FY 2001). This change includes the following items:

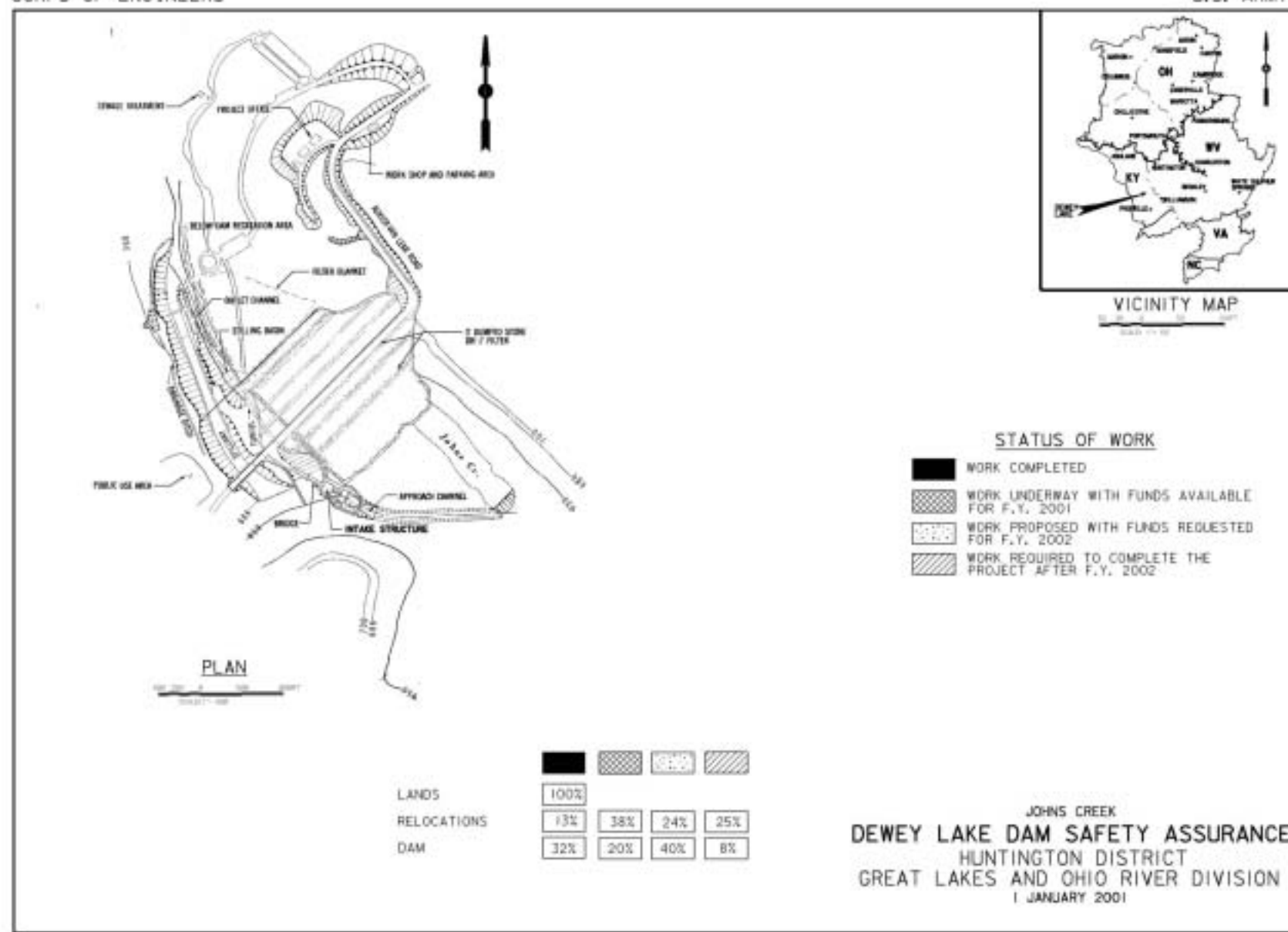
Item	Amount
Price Escalation on Construction Features	- \$ 355,000
Post Contract Award and Other Estimating Adjustments	2,655,000
Total	\$2,300,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment was completed in December 1996 and resulted in a Finding of No Significant Impact. A supplemental Environmental Assessment for relocation of State Route 302 and additional spoil sites was completed in January 2001, and resulted in a Finding of No Significant Impact.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were reprogrammed to the project in FY 1994 from funds appropriated for the initiation of dam safety projects.

The Dewey Lake, Kentucky Spillway Deficiency Report for the Dam Safety Assurance Program was approved by the Assistant Secretary of the Army for Civil Works on June 23, 1994.

The scheduled completion date has been changed from September 2003, the latest completion date presented to Congress (FY 2001), to Being Determined.



APROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Johnstown, Pennsylvania (Major Rehabilitation) (Continuing)

LOCATION: The City of Johnstown is located in the southwestern corner of Cambria County, Pennsylvania, approximately 60 miles east of Pittsburgh. The existing project, which was constructed in six separate units, extends over approximately 3.5 miles on the Conemaugh River (Units 1, 2 and 3), 1.5 miles on the Little Conemaugh River (Unit 4) and 4.0 miles on the Stonycreek River (Units 5 and 6).

DESCRIPTION: The existing project consists of approximately nine miles of channel widening, deepening, concrete-paved channel side slopes, and concrete walls. It was constructed during the period 1938 to 1943 at a total cost of \$8,865,400. Stream channel improvements include 84,500 lineal feet of concrete side slopes, 3,000 feet of low earth dikes, 9,222 lineal feet of concrete floodwalls, and associated highway, railroad and utility relocations. Approximately 16,300 feet of privately constructed masonry and concrete walls, which existed prior to the construction of the existing project, serve as flood walls as an integral part of the existing project. The area includes 23 bridge crossings. The major rehabilitation project involves rehabilitation of 54 Federally-constructed and privately-constructed wall sections and/or side slopes, replacement of a balustrade safety wall atop a section of the existing project, and the acquisition of real estate interests for construction access to unreliable non-Federal walls. All work is programmed.

AUTHORIZATION: Flood Control Act of 1936 as amended (original project) and the Energy and Water Development Appropriations Act, 1991 (major rehabilitation project).

REMAINING BENEFIT-REMAINING COST RATIO: 8.9 to 1 at 8 percent.

TOTAL BENEFIT - COST RATIO: 29 to 1 at 8 percent.

INITIAL BENEFIT-COST RATIO: 8.9 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT - COST RATIO: Benefits are from Appendix 7 to the Johnstown Rehabilitation Evaluation Report, dated March 1994, at October 1993 price levels.

SUMMARIZED FINANCIAL DATA:		PCT. OF EST FED. COST	STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$32,500,000		Entire Project	77	September 2002
Estimated Non-Federal Cost	0				
Cash Contributions	0				
Other Costs	0				
Total Estimated Project Cost	\$32,500,000				

		ACCUM. PCT. OF EST. FED. COST	PHYSICAL DATA	
Allocations to 30 September 2000	\$ 22,552,000		Channel Excavation	34,000 CY
Conference Allowance for FY 2001	\$ 7,000,000		Reinforcing Steel	320,000 LB
Allocation for FY 2001	\$ 6,866,000 ^{1/}		Rehabilitate Walls	10,900 FT
Allocation through FY 2001	\$ 29,418,000	91	Rehabilitate Side Slopes	1,965 FT
			Rehabilitate Balustrade	3,275 FT
Allocation Requested for FY 2002	\$ 3,082,000	100		
Programmed Balance to Complete after FY 2002	0			
Unprogrammed Balance to Complete after FY 2002	0			

^{1/} Reflects a reduction of \$1,120,000 as savings and slippage, \$14,000 rescinded in accordance with Consolidated Appropriations Act, 2001 and \$1,000,000 reprogrammed to the project in FY 2001.

JUSTIFICATION: Johnstown has a national reputation for its flooding history. In 1889, the failure of a privately-owned upstream dam caused the death of 2,200 people. The March, 1936 flood prompted authorization of the existing project in the Flood Control Act of 1936. The existing project has been very effective, reducing flood damages by an estimated \$801 million through 1998. Fifty-four walls that provide flood protection (both Federally owned and non-Federally owned, but all part of the project) have been found to be structurally unreliable, and major rehabilitation is needed to ensure the existing level of flood protection is provided in the future to avoid further loss of life and damage to property.

Division: Great Lakes & Ohio River

District: Pittsburgh

Johnstown, PA
(Major Rehabilitation)

3 April 2001

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FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Real Estate Acquisition	\$ 30,000
Continue Construction	\$ 2,622,000
Continue Planning, Engineering and Design	\$ 180,000
Continue Construction Management	\$ 250,000
Total	\$ 3,082,000

NON-FEDERAL COST: In accordance with the Major Rehabilitation Project authorizing legislation, the city of Johnstown is responsible for providing rights of access, including temporary and permanent easements, sufficient to enable the Government to repair or replace those non-Federally owned buildings and walls that were incorporated into the line of protection at the convenience of the Government when the existing project was constructed. The costs of the rights of access are negligible. In addition, the city will hold and save the United States free from damages due to construction or operation and maintenance of the work on the non-Federal structures, except for damages due to the fault or negligence of the United States or its contractors. The city is responsible for environmental investigations or response actions necessary for the city to secure needed rights of access.

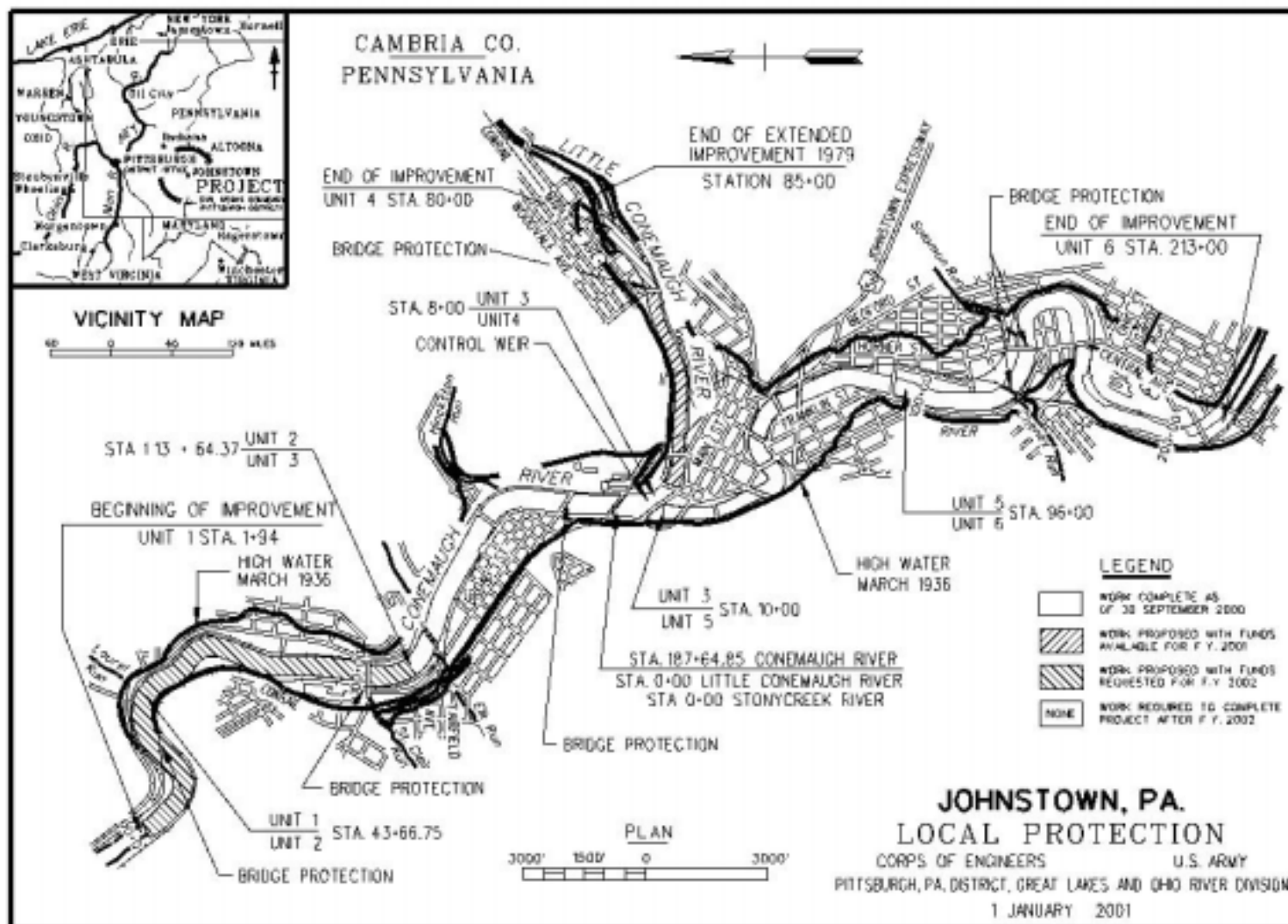
STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement for the Major Rehabilitation Project with the City of Johnstown was executed in April 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate (\$32,500,000) remains unchanged from the last estimate presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment was completed during the rehabilitation study, and a signed Finding of No Significant Impacts was included in the Major Rehabilitation Evaluation Report, dated March 1994.

OTHER INFORMATION: The existing Johnstown local flood protection project was authorized and constructed under the Flood Control Act of 1936, as amended, and the Corps of Engineers was given the responsibility for its operation and maintenance. The Energy and Water Development Appropriations Act, 1991, allocated funds for the major rehabilitation from Operations and Maintenance, General appropriations and authorized and directed the Corps of Engineers to undertake a major rehabilitation of the existing project. The Act further directed the Corps to investigate the non-Federally owned buildings, embankments, and walls that were included in the original line of protection for the convenience of the Government and to perform needed repair, rehabilitation, or replacement at Federal expense.

The scheduled completion date of September 2002 is unchanged from the latest completion date presented to Congress (FY 2001).



3 April 2001

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APPROPRIATION TITLE: Construction, General - (Dam Safety Assurance)

PROJECT: Bluestone Lake, West Virginia (Dam Safety Assurance) (Continuing)

LOCATION: The dam is located in southern West Virginia, in Summers County, on the New River two miles south of Hinton, West Virginia. It is situated 2.5 miles downstream from the confluence of the New and Bluestone Rivers, and 0.8 miles upstream from the confluence of the New and Greenbrier Rivers.

DESCRIPTION: The dam modifications include stability improvements such as installation of post tensioning high strength steel anchors, construction of mass concrete thrust blocks at the downstream face of the dam, and buttressing of the gate piers to resist increased hydraulic loading. The height of the dam will be raised by 8 feet and an additional monolith constructed at the east abutment to prevent overtopping of the existing dam and safely accommodate the probable maximum flood. A floodgate closure will be constructed across a state highway at the west abutment. The existing hydropower penstocks will be extended and retrofitted with gates to supplement the discharge capacity of the spillway and outlet works.

AUTHORIZATION: Executive Order of the President 7183-A, September 12, 1935; Flood Control Acts of 1936 and 1938.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA:

Original Project

Actual Federal Cost	\$ 28,618,100
Actual Non-Federal Cost	\$ 0
Total Original Project Cost	\$ 28,618,100

Division: Great Lakes & Ohio River

District: Huntington

Bluestone Lake, WV
(Dam Safety Assurance)

3 April 2001

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SUMMARIZED FINANCIAL DATA: (continued)

Project Modification		STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$ 112,300,000	Project Modification	10	Being Determined
Estimated Non-Federal Cost	0			
Total Estimated Modification Cost	\$ 112,300,000			
Total Estimated Project Cost	\$ 140,918,100			

PHYSICAL DATA

Increase height of dam 8 feet; install anchors and thrust blocks; construct gate closure across State Route 20; modify penstocks to supplement discharge capacity; relocate electrical lines.

ACCUM
PCT OF EST
FED COST

Allocations to 30 September 2000	\$ 3,349,000	
Conference Allowance for FY 2001	10,000,000	
Allocation for FY 2001	8,114,000	1/
Allocations through FY 2001	11,463,000	10
Allocation Requested for FY 2002	8,000,000	17
Programmed Balance to Complete after FY 2002	\$ 92,837,000	
Unprogrammed Balance to Complete after FY 2002	0	

1/ Reflects \$1,600,000 reduction assigned as savings and slippage, \$266,000 reprogrammed from the project, and \$20,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: The probable maximum flood is estimated to overtop the existing dam by 8 feet. Evaluations to date indicate the dam is in imminent danger of failure at pool levels approaching the top of dam. Dam failure would cause catastrophic flooding along the Greenbrier, New, Gauley, Kanawha, and Elk Rivers, including the metropolitan area and heavily industrialized capital city of Charleston, West Virginia. This is a serious public safety concern, with more than 115,000 persons at risk. Property damage would exceed \$6.5 billion.

Division: Great Lakes & Ohio River

District: Huntington

Bluestone Lake, WV
(Dam Safety Assurance)

3 April 2001

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FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Construction	\$ 6,720,000
Continue Planning, Engineering and Design	640,000
Continue Construction Management	640,000
Total	\$ 8,000,000

NON-FEDERAL COST: None. The dam safety assurance modification is being performed at full Federal expense.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$ 112,300,000 is a decrease of \$ 3,500,000 from the latest estimate (\$115,800,000) presented to Congress (FY 2001). This change includes the following items:

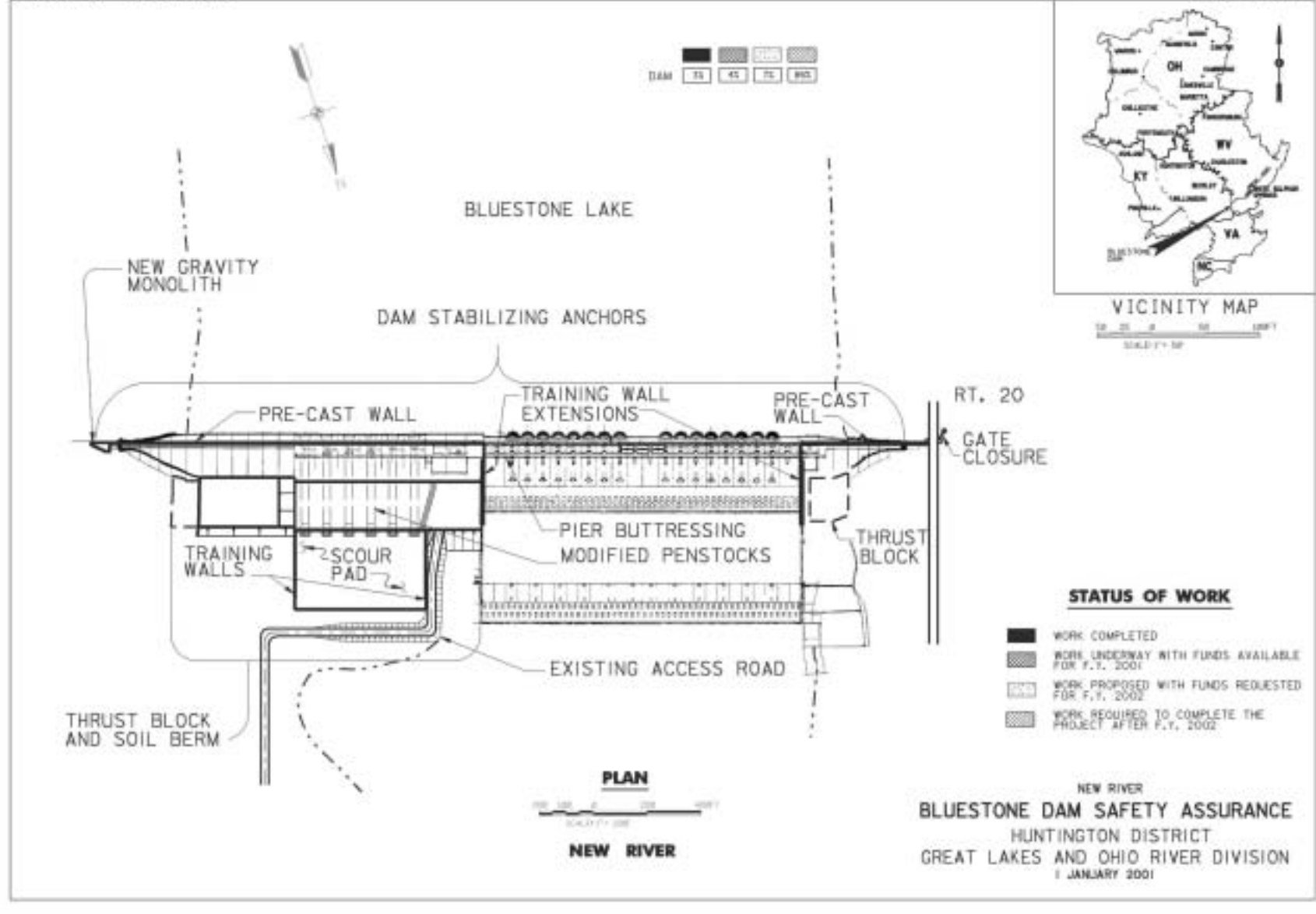
Item	Amount
Price Escalation on Construction Features	- \$ 7,100,000
Post Contract Award and Other Estimating Adjustments	3,600,000
Total	- \$ 3,500,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with EPA on August 31, 1998.

OTHER INFORMATION: The scheduled completion date has changed from September 2007, the latest completion date presented to Congress (FY 2001), to Being Determined.

CORPS OF ENGINEERS

U.S. ARMY



3 April 2001

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APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: London Locks and Dam, West Virginia (Major Rehabilitation) (Continuing)

LOCATION: The London Locks and Dam project in Kanawha County, West Virginia consists of a non-navigable high lift dam with two 360- by 56-foot lock chambers. The project is located at river mile 82.8 on the Kanawha River, the most upstream of the Kanawha's three locks and dams. The dam provides a 9-foot navigable depth for a distance of 7.8 miles along the Kanawha River upstream to the head of navigation.

DESCRIPTION: The river lock chamber length will be extended by removing the existing upper miter gates, and re-installing those gates upstream at the emergency dam sill, but still within the confines of the existing lock walls. The upper guard wall is in a failure mode and will be replaced. Other rehabilitation efforts in the river chamber include epoxy crack and joint repair, replacement of missing or damaged wall armor, corner protection, check posts, line hooks, and grating. The existing monolithic concrete upstream guard wall will be removed, along with approximately 28,000 cubic yards of existing rock fill originally placed to stabilize the wall and the rock filled timber cribbing foundation. Some disposal material will be used to construct a flow control dike in the tailwater to improve the lower approach condition, and the remainder will be disposed of by random boulder placement in the upper Marmet pool, the designated disposal area at the Winfield locks and dam, or other existing approved landfills.

AUTHORIZATION: River and Harbor Act of 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 21.1 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 21.1 to 1 at 7 1/8 percent.

INITIAL BENEFIT COST RATIO: 20.5 to 1 at 7 1/8 percent (FY 2000)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in May 1997 at October 1996 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Major Rehabilitation		\$22,200,000	Entire Project	15	Being Determined
General Appropriations	\$11,100,000				
Inland Waterways Trust Fund	11,100,000				

Estimated Non-Federal Cost	0	Existing: Lock chambers: 2 @ 56 ft. X 360 ft. Lift: 24 ft.
Total Estimated Project Cost	\$22,200,000	Adjustment: Extend river chamber 47 ft. Replace upper guard wall

	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2000	\$1,193,000	\$ 1,193,000	
Conference Allowance for FY2001	900,000	900,000	
Allocation for FY2001	605,000 1/	605,000 2/	
Allocations through FY2001	1,798,000	1,798,000	16
Allocation Requested for FY 2002	2,150,000	2,150,000	36
Programmed Balance to Complete after FY 2002	7,152,000	7,152,000	
Unprogrammed Balance to Complete after FY 2002	0	0	

1/ Reflects \$144,000 reduction assigned as savings and slippage, \$149,000 reprogrammed from the project, and \$2,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

2/ Reflects \$144,000 reduction assigned as savings and slippage, \$149,000 reprogrammed from the project, and \$2,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: The reliability of this project is in jeopardy. The upper guard wall has failed structurally. Its replacement is necessary to continue operation of the locks and is considered the baseline condition for the continued use of the existing project. Upper guard wall replacement will enable safe, reliable levels of service. Physical alteration (extension) to the existing riverward lock chamber size better serves modern tows, and will permit the chamber to accommodate two jumbo barges in a single lockage cycle, instead of one jumbo as limited by current lock size, and will increase the lock's capacity by 21 percent. Delays and queuing are substantially lessened. Coal is the major commodity passing through London locks. The average tonnage since 1989 has increased from 4.8 million tons (1989) to 6.5 million tons (1999), an annual increase of 3.1 percent. Traffic demand is expected to grow at an annual rate of 2.3 percent. Since 1988, jumbo barges have been the dominant barge type at London, and represent the largest component of the Kanawha River barge fleet. Use of jumbo barges is expected to grow, since commercial operators are showing an increased preference for these larger barges due to their efficiency on the rest of the inland waterway system. The existing lock size of 56- by 360-feet accommodates 4 standard barges in a single lockage, or one jumbo. Extension of the lock length will expand the capacity to two jumbo barges per lockage.

Average annual benefits for the project are \$1,379,127, all for commercial navigation.

FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue Construction	\$ 3,750,000
Planning, Engineering, and Design	200,000
Construction Management	350,000
Total	\$ 4,300,000

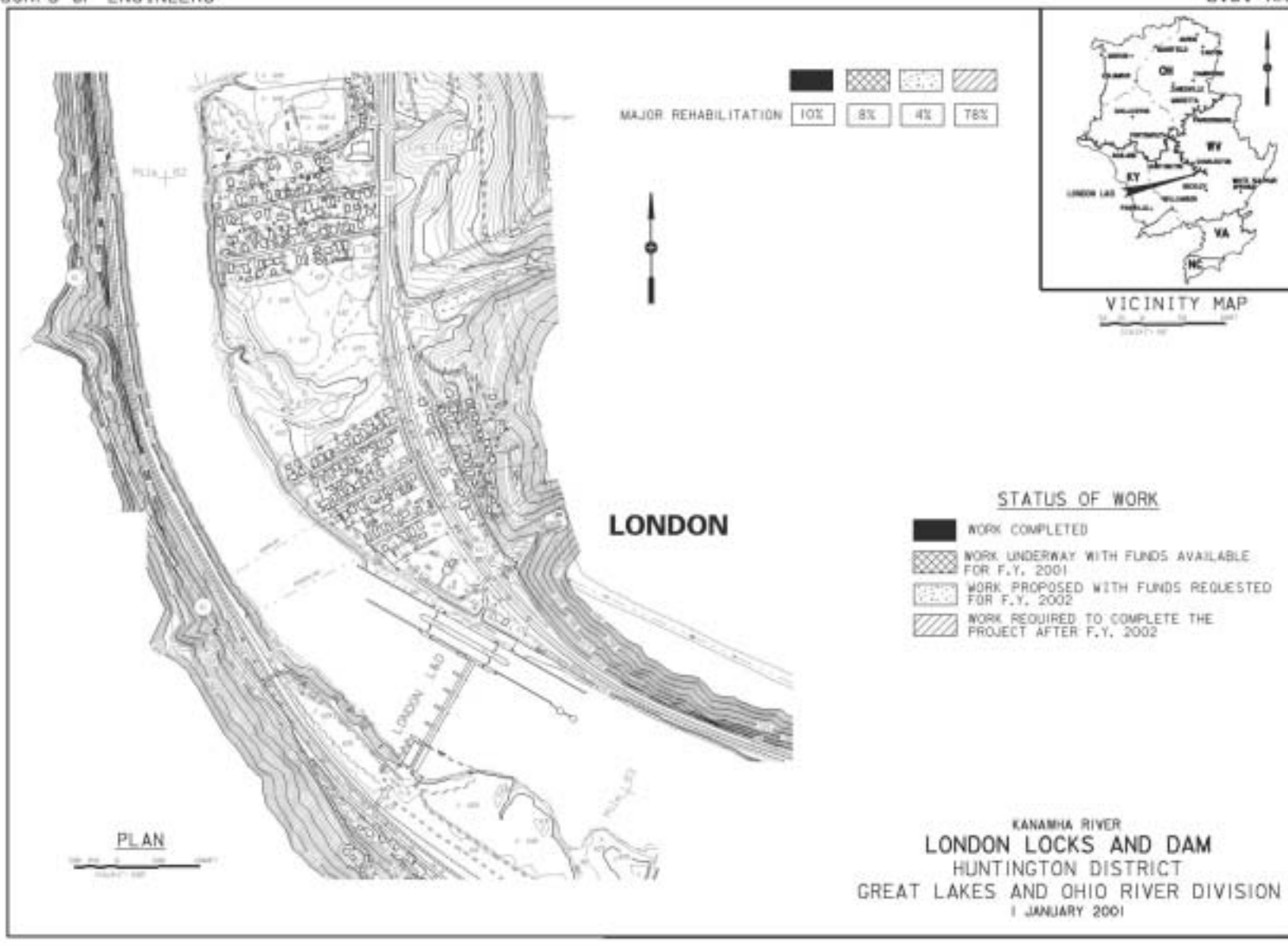
NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total costs of construction will be derived from the Inland Waterways Trust Fund.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$22,200,000 is unchanged from the latest estimate (\$22,200,000) presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment (EA) was circulated and approved. The Finding of No Significant Impact (FONSI) was signed on August 22, 1997. The EA was submitted in lieu of an Environmental Impact Statement since no significant adverse environmental impacts are anticipated. The proposed improvements are limited to the immediate vicinity of a frequently disturbed lock approach, involve water-based construction methods, will not result in an increase in system-wide navigation traffic, and will diversify the physical habitats available to aquatic organisms.

OTHER INFORMATION: General Investigations funds for preconstruction engineering and design were appropriated in FY 1997 and FY 1998, prior to a determination that the proposed project is a major rehabilitation. Funds to initiate construction were appropriated in FY 2000.

The scheduled physical completion date has changed from September 2004, the date last submitted to Congress (FY2001), to Being Determined



APPROPRIATION TITLE: Construction, General - (Dam Safety Assurance)

PROJECT: Tygart Lake, West Virginia (Dam Safety Assurance) (Continuing)

LOCATION: Tygart Lake is located in the northern part of West Virginia on the Tygart River in Taylor County, WV. The lake that is formed by Tygart Dam extends into Barbour County, WV. The dam is located approximately 2.25 miles upstream of the city of Grafton, WV and 23.1 miles upstream of the City of Fairmont, WV, where the Tygart and the West Fork Rivers join to form the Monongahela River.

DESCRIPTION: Tygart Dam is a concrete gravity-type structure with an uncontrolled spillway located approximately in the center of the dam. The overall length of the dam is 1,921 feet and the width of the spillway opening is 489 feet. Tygart Dam is currently hydraulically and structurally deficient. The Dam Safety Evaluation Report concluded that the dam would not pass the Probable Maximum Flood, which for Tygart is the Base Safety Condition without overtopping. The current regulation states that the dam should pass the Project Maximum Flood without overtopping.

AUTHORIZATION: The Tygart Lake Project was initially authorized by the Public Works Administration as Public Works Administration Project No. 44 on 12 January 1934. The Rivers and Harbors Act of 30 August 1935 directed the Corps of Engineers to assume responsibility for the project.

REMAINING BENEFIT-REMAINING COST RATIO: Not Applicable

TOTAL BENEFIT - COST RATIO: Not Applicable

INITIAL BENEFIT - COST RATIO: Not Applicable

BASIS OF BENEFIT - COST RATIO: Not Applicable

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST FED. COST.	STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
			Entire Project	58	September 2002
Estimated Federal Cost	\$9,500,000				
Programmed Construction	\$9,500,000				
Unprogrammed Construction	0				
Estimated Non-Federal Cost	0				
Programmed Construction	0				
Cash Contributions	0				
Other Costs	0				
PHYSICAL DATA (Existing Data)					
Estimated Non-Federal Costs	0		Concrete Gravity Dam		1,921' long
Unprogrammed Construction	0		Center Spillway Section		490' long
Cash Contributions	0		10 Center Sluice Outlets		
			Total Reservoir Storage		3,430 acres
Total Estimated Programmed Construction	\$9,500,000				287,700 acre-feet
Total Estimated Unprogrammed Construction	0				
Total Estimated Project Costs	\$9,500,000				
Allocations to 30 Sep 2000	\$4,491,000				
Conference Allowance for FY 2001	\$4,293,000				
Allocation for FY 2001	\$3,598,000 ^{1/}				
Allocation thru FY 2001	\$8,589,000	85			
Allocation Requested for FY 2002	\$1,411,000	100			
Programmed Balance to Complete After FY 2002	0				
Unprogrammed Balance to Complete After FY 2002	0				

^{1/} Reflects \$687,000 reduction for savings and slippage and \$8,000 rescinded in accordance with Consolidated Appropriations Act, 2001.

Division: Great Lakes & Ohio River

District: Pittsburgh

3 April 2001

Tygart Lake, WV
(Dam Safety Assurance)
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JUSTIFICATION: Tygart Dam is currently hydraulically and structurally deficient. It has an inadequate discharge and or storage capacity to safely pass the probable maximum flood, and will result in the dam being overtopped. It is judged that overtopping of this magnitude is likely to cause sudden and complete failure of the dam. The dam also fails to meet current criteria for structural stability. An estimate of the damages of a dam failure with a probable maximum flood exceeds 2 billion dollars.

FISCAL YEAR 2002: The requested amount will be applied as follows:

Complete Planning, Engineering and Design	\$ 25,000
Complete Construction Contract	\$1,286,000
Complete Construction Management	<u>\$ 100,000</u>
	\$1,411,000

NON-FEDERAL COST: None

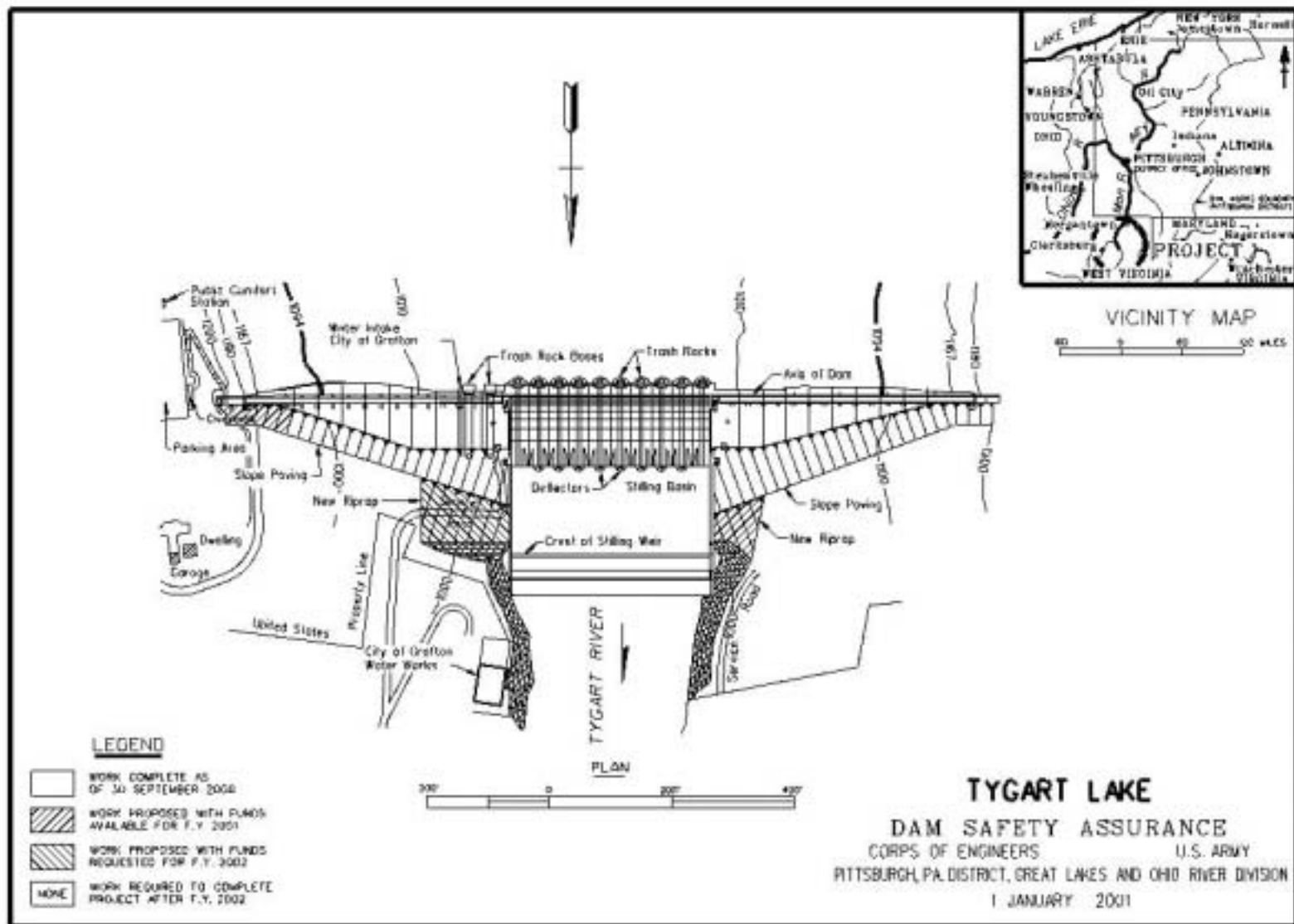
STATUS OF LOCAL COOPERATION: Not Applicable

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$9,500,000 remains unchanged from the last estimate.

STATUS OF ENVIRONMENTAL ASSESSMENT: NEPA documentation consisted of a final Environmental Assessment. A finding of No Significant Impact was signed on November 7, 1997. A section 404(b)(1) analysis was not required.

OTHER INFORMATION: The Tygart Dam Safety Assurance Evaluation Report was approved by the Assistant Secretary of the Army (Civil Works) in April 1996.

The scheduled completion date of September 2002 is unchanged from the latest completion date presented to Congress (FY 2001).



3 April 2001

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**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation

a. Channels and Harbors

The program request of \$60,520,000 provides for the operational requirements of 61 projects. Requirements include: dredging, snagging, repairing channel stabilization works, harbor jetties, navigation structures, constructing bulkheads and confined disposal areas.

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Illinois			
Calumet Harbor and River (IL & IN)	3,032,000 (203,000) (2,829,000)	3,709,000 (203,000) (3,506,000)	1. None. 2. Dredge harbor channels.
Chicago Harbor	3,813,000 (1,262,000) (2,551,000)	2,662,000 (1,612,000) (1,050,000)	1. Initiate breakwater major rehabilitation report for Chicago Harbor in FY 2002. 2. Repair deteriorated breakwater.
Chicago River	350,000 (350,000) (0)	362,000 (362,000) (0)	1. None. 2. None.
Lake Michigan Diversion	810,000 (810,000) (0)	1,037,000 (1,037,000) (0)	1. Convene the Technical Committee. 2. None.
Waukegan Harbor	1,220,000 (197,000) (1,023,000)	770,000 (70,000) (700,000)	1. Complete the Dredged Material Management Plan in FY 2001. 2. Dredge the harbor approach channel.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

a. **Channels and Harbors** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Indiana			
Burns Waterway Harbor	3,049,000 (227,000) (2,822,000)	3,977,000 (227,000) (3,750,000)	1. None. 2. Repair deteriorated breakwater.
Indiana Harbor	410,000 (64,000) (346,000)	64,000 (64,000) (0)	1. None. 2. None.
Michigan City Harbor	963,000 (56,000) (907,000)	1,495,000 (459,000) (1,036,000)	1. Perform Dredged Material Management Plan and environmental windows modification study in FY 2002. 2. Dredge outer harbor.
Kentucky			
Big Sandy Harbor	935,000 (35,000) (900,000)	1,099,000 (35,000) (1,064,000)	1. None. 2. Perform dredging to maintain navigation channel.
Michigan			
Channels in Lake St. Clair	63,000 (47,000) (16,000)	118,000 (77,000) (41,000)	1. Perform sediment coordination in FY 2002. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (continued)

a. Channels and Harbors (continued)

State/ Project Name	ESTIMATED OBLIGATIONS (\$)		Reason For Change and Major Maintenance Items
	FY 2001 TOTAL	FY 2002 TOTAL	
	(Operations) (Maintenance)	(Operations) (Maintenance)	
Michigan (continued)			
Charlevoix Harbor	83,000 (41,000) (42,000)	122,000 (40,000) (82,000)	1. None. 2. None.
Detroit River	2,377,000 (697,000) (1,680,000)	3,692,000 (1,060,000) (2,632,000)	1. Variation in condition survey costs and sediment coordination in FY 2002. 2. Locate and remove obstructions and dredging in navigation channel.
Frankfort Harbor	135,000 (43,000) (92,000)	47,000 (47,000) (0)	1. None. 2. None.
Grand Haven Harbor	618,000 (278,000) (340,000)	2,239,000 (273,000) (1,966,000)	1. None. 2. Repair concrete cap, north pier, section B and south revetment, sec R and dredging.
Grand Traverse Bay Harbor	0 (0) (0)	10,000 (10,000) (0)	1. Conduct condition surveys in FY 2002. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

a. **Channels and Harbors** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Michigan (continued)			
Holland Harbor	1,040,000 (181,000) (859,000)	554,000 (188,000) (366,000)	1. None. 2. None.
Keweenaw Waterway	336,000 (43,000) (293,000)	804,000 (60,000) (744,000)	1. Perform water quality monitoring in FY 2002. 2. Perform dredging.
Leland Harbor	194,000 (20,000) (174,000)	191,000 (20,000) (171,000)	1. None. 2. None.
Ludington Harbor	601,000 (154,000) (447,000)	103,000 (95,000) (8,000)	1. Perform beach nourishment activities in FY 2001. 2. None.
Manistee Harbor	396,000 (54,000) (342,000)	42,000 (42,000) (0)	1. Variation in condition survey costs and real estate activities in FY 2001. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (continued)

a. Channels and Harbors (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Michigan (continued)			
Marquette Harbor	0 (0) (0)	239,000 (10,000) (229,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Menominee Harbor (MI & WI)	106,000 (24,000) (82,000)	104,000 (100,000) (4,000)	1. Perform condition surveys in FY 2002. 2. None.
Monroe Harbor	799,000 (45,000) (754,000)	52,000 (52,000) (0)	1. Perform sediment sampling in FY 2002. 2. None.
Muskegon Harbor	0 (0) (0)	451,000 (19,000) (432,000)	1. Perform sediment sampling coordination in FY 2002. 2. None.
Ontonagon Harbor	594,000 (110,000) (484,000)	1,544,000 (48,000) (1,496,000)	1. Perform condition surveys in FY 2002. 2. None.
			1. Perform sediment sampling, archaeological investigations and real estate activities in FY 2001. 2. Repair west pier center and failed tie rods.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

a. **Channels and Harbors** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Michigan (continued)			
Pentwater Harbor	400,000 (30,000) (370,000)	185,000 (25,000) (160,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Portage Lake Harbor	807,000 (21,000) (786,000)	2,518,000 (19,000) (2,499,000)	1. Perform real estate activities FY 2001. 2. None.
Rouge River	461,000 (67,000) (394,000)	87,000 (87,000) (0)	1. None. 2. Repair north and south piers, sections A and B, phase I.
Saginaw River	1,984,000 (525,000) (1,459,000)	1,587,000 (345,000) (1,242,000)	1. Variation in condition survey costs in FY 2002. 2. None.
Saugatuck Harbor	408,000 (52,000) (356,000)	1,231,000 (30,000) (1,201,000)	1. Perform sediment coordination and confined disposal facility study in FY 2001. 2. Perform dredging.
			1. Conduct archaeological investigations in FY 2001. 2. Repair north and south revetment, phase II.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

a. **Channels and Harbors** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Michigan (continued)			
St. Clair River	2,622,000 (92,000) (2,530,000)	759,000 (242,000) (517,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
St. Joseph Harbor	631,000 (160,000) (471,000)	638,000 (160,000) (478,000)	1. Perform Dredged Material Management Plan in FY 2002. 2. None.
South Haven Harbor	68,000 (15,000) (53,000)	1,563,000 (15,000) (1,548,000)	1. None. 2. Repair north revetment, sections F&G.
Minnesota			
Duluth-Superior Harbor (MN & WI)	2,432,000 (669,000) (1,763,000)	2,692,000 (871,000) (1,821,000)	1. Variation in condition surveys and water quality monitoring costs in FY 2002. 2. Repair superior entry piers; perform dredging.
New York			
Buffalo Harbor	176,000 (89,000) (87,000)	515,000 (63,000) (452,000)	1. Variation in condition survey costs and perform ERGO preliminary assessments in FY 2001. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

a. **Channels and Harbors** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
New York (continued)			
Dunkirk Harbor	310,000 (20,000) (290,000)	280,000 (20,000) (260,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
			1. None. 2. None.
Great Sodus Bay Harbor	0 (0) (0)	50,000 (50,000) (0)	1. Perform environmental testing in FY 2002. 2. None.
Little Sodus Bay Harbor	0 (0) (0)	50,000 (50,000) (0)	1. Perform environmental testing in FY 2002. 2. None.
Oswego Harbor	353,000 (20,000) (333,000)	20,000 (20,000) (0)	1. None. 2. None.
Rochester Harbor	725,000 (30,000) (695,000)	35,000 (35,000) (0)	1. Variation in condition survey costs in FY 2002. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (continued)

a. Channels and Harbors (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Ohio			
Ashtabula Harbor	810,000 (150,000) (660,000)	2,051,000 (26,000) (2,025,000)	1. Variation in condition survey costs in FY 2001. 2. Perform breakwater repairs, dewatering facility construction, upland CDF construction and dredging.
Cleveland Harbor	6,905,000 (145,000) (6,760,000)	3,700,000 (100,000) (3,600,000)	1. Perform ERGO implementation in FY 2001. 2. Perform dredging, breakwater repairs and construction of east breakwater.
Conneaut Harbor	35,000 (20,000) (15,000)	30,000 (30,000) (0)	1. Variation in condition survey costs and perform environmental compliance activities in FY 2002. 2. None.
Fairport Harbor	1,735,000 (35,000) (1,700,000)	1,235,000 (35,000) (1,200,000)	1. None. 2. Perform dredging and breakwater repairs.
Huron Harbor	40,000 (40,000) (0)	1,040,000 (40,000) (1,000,000)	1. None. 2. Perform dredging and repair east breakwater.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (continued)

a. Channels and Harbors (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Ohio (continued)			
Lorain Harbor	1,752,000 (90,000) (1,662,000)	1,100,000 (40,000) (1,060,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Port Clinton Harbor	0 (0) (0)	1,080,000 (0) (1,080,000)	1. Conduct CDF study activities in FY 2001. 2. Perform west pier repair, breakwater repairs, and E&D for new CDF.
Sandusky Harbor	670,000 (70,000) (600,000)	950,000 (50,000) (900,000)	1. Variation in condition survey costs and ERGO preliminary assessments in FY 2001. 2. Perform dredging.
Toledo Harbor	3,700,000 (320,000) (3,380,000)	3,211,000 (120,000) (3,091,000)	1. Conduct Dredged Material Management Plan activities in FY 2001. 2. Perform dredging.
Touissant River	300,000 (0) (300,000)	10,000 (10,000) (0)	1. Perform condition surveys in FY 2002. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

a. **Channels and Harbors** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Pennsylvania			
Erie Harbor	100,000 (60,000) (40,000)	70,000 (70,000) (0)	1. Variation in condition survey costs in FY 2002. 2. None.
Wisconsin			
Green Bay Harbor	2,600,000 (422,000) (2,178,000)	1,641,000 (315,000) (1,326,000)	1. Variation of condition survey costs in FY 2001. 2. Perform dredging.
Kenosha Harbor	92,000 (12,000) (80,000)	1,122,000 (12,000) (1,110,000)	1. None. 2. Repair north detached breakwater.
Kewaunee Harbor	118,000 (60,000) (58,000)	210,000 (60,000) (150,000)	1. None. 2. None.
Manitowoc Harbor	448,000 (70,000) (378,000)	249,000 (68,000) (181,000)	1. None. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

a. **Channels and Harbors** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Wisconsin (continued)			
Milwaukee Harbor	328,000 (269,000) (59,000)	603,000 (285,000) (318,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Pensaukee Harbor	0 (0) (0)	488,000 (12,000) (476,000)	1. Perform condition surveys in FY 2002. 2. None.
Port Wing Harbor	35,000 (5,000) (30,000)	260,000 (12,000) (248,000)	1. Variation in condition survey costs in FY 2002. 2. None.
Sheboygan Harbor	201,000 (40,000) (161,000)	46,000 (46,000) (0)	1. Variation in real estate activities in FY 2002. 2. None.
Sturgeon Bay Harbor and Lake Michigan Ship Canal	328,000 (68,000) (260,000)	2,625,000 (73,000) (2,552,000)	1. None. 2. Repair south revetment, section N.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (continued)

a. Channels and Harbors (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Wisconsin (continued)			
Two Rivers Harbor	443,000 (20,000) (423,000)	1,102,000 (25,000) (1,077,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Other Projects	10,045,000	0	
Maintained	(853,000)	(0)	
Periodically	(9,192,000)	(0)	
TOTAL, Channels and Harbors	63,986,000 (9,480,000) (54,506,000)	60,520,000 (9,671,000) (50,849,000)	

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (continued)

b. Locks, Dams and Canals

The program request of \$130,044,000 provides for the operational requirements of 12 projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies and parts for day-to-day functioning of projects; periodic maintenance, repairs and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001</u> <u>TOTAL</u> (Operations) (Maintenance)	<u>FY 2002</u> <u>TOTAL</u> (Operations) (Maintenance)	
Kentucky			
Green and Barren Rivers	1,079,000 (1,079,000) (0)	1,079,000 (1,079,000) (0)	1. None. 2. None.
Kentucky River	1,149,000 (914,000) (235,000)	913,000 (913,000) (0)	1. None. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (continued)

b. Locks, Dams and Canals (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Kentucky (continued)			
Ohio River Locks and Dams -	30,084,000	28,572,000	
Louisville District	(12,524,000)	(12,546,000)	1. None.
(Lower River Segment, Mile 438.0 to Mile 981.0; KY, IL, IN & OH)	(17,560,000)	(16,026,000)	2. Replace culvert valves, install valves in hydraulic pipes, install stand-by generator, and paint emergency gate sheaves at Cannelton Lock; replace 4 inch hydraulic pipe, replace dam bulkhead, dewater and inspect land chamber, modify 4 miter gate anchorages, modify 2 culvert valves, and cut bulkhead slot at Markland Lock; replace trolley system on dam, and replace cable connections on tainter gates at JT Myers Lock; repair steel plating on tainter gates, paint culvert valves and repair dam stilling basin at Newburgh Lock; dewater and inspect land chamber at Smithland Lock; rework lower 600 foot miter gate at L/D 53; fabricate downstream dewatering closure; repair wall armor; replace piling of filling and emptying system flume; and replace plates of tainter gates at Smithland Lock.
Ohio River Open Channel Work -	6,007,000	5,180,000	
Louisville District	(692,000)	(617,000)	1. Perform monitoring of mussel beds and least tern habitats in FY 2001.
(Lower River Segment, Mile 438.0 to Mile 981.0; KY, IL, IN & OH)	(5,315,000)	(4,563,000)	2. Perform navigation channel maintenance dredging, and clearing and snagging of channel and stabilize channel at Kentucky Peninsula in order to maintain authorized navigation channel.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

b. **Locks, Dams and Canals** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
New York			
Black Rock Channel and Tonawanda Harbor	2,516,000 (679,000) (1,837,000)	2,795,000 (745,000) (2,050,000)	1. None. 2. Complete construction of upper west wall; repair operating gate hydraulics.
Pennsylvania			
Allegheny River	10,321,000 (4,155,000) (6,166,000)	6,015,000 (4,112,000) (1,903,000)	1. None. 2. Repair scour protection at Dam 4.
Monongahela River (PA & WV)	15,253,000 (7,815,000) (7,438,000)	14,203,000 (8,563,000) (5,640,000)	1. Compliance with Resource Management requirement to standardize indirect costs. 2. Repair and recoat tainter gates and bulkheads at Maxwell Lock and L/D 4; rehabilitate lock electrical system at L/D 2; and renovate middle wall emptying butterfly valve at L/D 2.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

b. **Locks, Dams and Canals** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Pennsylvania (continued)			
Ohio River Locks and Dams -	18,958,000	19,321,000	
Pittsburgh District	(8,496,000)	(8,901,000)	1. None.
(Upper River Segment, Mile 0.0 to Mile 127.2; PA, OH & WV)	(10,462,000)	(10,420,000)	2. Replace lift gates at Emsworth Lock; replace upper lock gate at New Cumberland Lock; complete Poiree dam repairs at Emsworth Lock; dewater river lock chamber and install miter gates at New Cumberland Lock; dewater river lock chamber at Dashields Lock and perform repairs; renovate land and river wall emptying tainter valves at Pike Island Lock.
Ohio River Open Channel Work -	718,000	58,000	
Pittsburgh District	(0)	(0)	1. None.
(Upper River Segment, Mile 0.0 to Mile 127.2; PA, OH & WV)	(718,000)	(58,000)	2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

b. **Locks, Dams and Canals** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Tennessee			
Chickamauga Lock, Tennessee River	1,900,000 (0) (1,900,000)	2,315,000 (0) (2,315,000)	1. None. 2. Continue lock repair activities including performing post tensioning, inspections, shear reinforcement work, and instrumentation for the lock walls.
Tennessee River (TN, AL, KY & MS)	14,484,000 (5,663,000) (8,821,000)	16,422,000 (5,768,000) (10,654,000)	1. None. 2. Dewater and repair Pickwick main, Pickwick auxiliary, and Wheeler Main Locks; Repair Pickwick auxiliary lock dewatering dam anchorages; fabricate and repair lock miter gate anchorages.
West Virginia			
Kanawha River	5,544,000 (4,343,000) (1,201,000)	6,799,000 (4,351,000) (2,448,000)	1. None. 2. Perform dredging, repair roller gate aprons at Marmet and London Locks, repair lower ladders at Marmet to meet OSHA regulations, and perform structural underway diving inspections.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (continued)

b. Locks, Dams and Canals (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
West Virginia (continued)			
Ohio River Locks and Dams - Huntington District (Middle River Segment, Mile 127.2 to Mile 438.0; WV, KY & OH)	17,351,000 (9,033,000) (8,318,000)	16,738,000 (8,935,000) (7,803,000)	1. None. 2. Perform structural underwater diving inspections; inspect and rehabilitate filling and emptying culvert valves in the auxiliary lock at R.C. Byrd Lock; rehabilitate upper miter gate, clean out laterals in auxiliary lock chamber, and replace side arm plates on tainter gates at Meldahl Lock; repair tainter gate anchor bolts, retainers, and side seals, and repair middle wall filling and emptying culvert valves at Racine Lock; replace permanent operating equipment; and replace dam hoist at Meldahl Lock.
Ohio River Open Channel Work - Huntington District (Middle River Segment, Mile 127.2 to Mile 438.0; WV, KY & OH)	2,374,000 (834,000) (1,540,000)	2,407,000 (592,000) (1,815,000)	1. Perform digitized mapping of navigation charts in FY 2001. 2. Perform navigation channel maintenance dredging.
Tygart Lake	968,000 (890,000) (78,000)	3,223,000 (670,000) (2,553,000)	1. Cost reduction initiatives have resulted in reductions to staffing and janitorial and mowing services. 2. Repair and replace service gates and upgrade electrical system.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. **Navigation** (continued)

b. **Locks, Dams and Canals** (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Wisconsin			
Fox River	3,410,000 (1,525,000) (1,885,000)	4,004,000 (1,476,000) (2,528,000)	1. None. 2. Continue repair of dam gate hoist mechanisms.
TOTAL, Locks, Dams and Canals	132,116,000 (58,642,000) (73,474,000)	130,044,000 (59,268,000) (70,776,000)	
TOTAL - NAVIGATION	196,102,000 (68,122,000) (127,980,000)	190,564,000 (68,939,000) (121,625,000)	

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control

a. Reservoirs

The program request of \$74,868,000 provides for the operational requirements of 72 flood control reservoirs. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts for day-to-day functioning of projects; periodic maintenance, repairs, and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001</u> <u>TOTAL</u> (Operations) (Maintenance)	<u>FY 2002</u> <u>TOTAL</u> (Operations) (Maintenance)	
Indiana			
Brookville Lake	782,000 (764,000) (18,000)	792,000 (792,000) (0)	1. None. 2. None.
Cagles Mill Lake	942,000 (732,000) (210,000)	674,000 (674,000) (0)	1. None. 2. None.
Cecil M. Harden Lake	864,000 (849,000) (15,000)	829,000 (779,000) (50,000)	1. None. 2. None.
J. Edward Roush Lake	799,000 (729,000) (70,000)	690,000 (690,000) (0)	1. None. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS (\$)		Reason For Change and Major Maintenance Items
	FY 2001 TOTAL	FY 2002 TOTAL	
	(Operations) (Maintenance)	(Operations) (Maintenance)	
Indiana (continued)			
Mississinewa Lake	972,000 (887,000) (85,000)	803,000 (803,000) (0)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Monroe Lake	799,000 (799,000) (0)	819,000 (819,000) (0)	1. Conduct dam stability studies in FY 2001. 2. None.
Patoka Lake	731,000 (731,000) (0)	757,000 (757,000) (0)	1. None. 2. None.
Salamonie Lake	962,000 (737,000) (225,000)	710,000 (710,000) (0)	1. None. 2. None.
Kentucky			
Barren River Lake	2,754,000 (1,847,000) (907,000)	1,900,000 (1,900,000) (0)	1. None. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Kentucky (continued)			
Buckhorn Lake	1,487,000 (1,127,000) (360,000)	1,440,000 (1,115,000) (325,000)	1. None. 2. None.
Carr Creek Lake	1,952,000 (1,324,000) (628,000)	1,656,000 (1,331,000) (325,000)	1. None. 2. None.
Cave Run Lake	1,114,000 (803,000) (311,000)	834,000 (834,000) (0)	1. None. 2. None.
Dewey Lake	1,402,000 (1,321,000) (81,000)	1,371,000 (1,244,000) (127,000)	1. None. 2. None.
Fishtrap Lake	1,723,000 (1,585,000) (138,000)	2,095,000 (1,897,000) (198,000)	1. Perform damage prevention evaluation, bridge inspection, hydraulic steel structure inspection, model development and calibration, and increased water management activities in FY 2002. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Kentucky (continued)			
Grayson Lake	1,232,000 (1,070,000) (162,000)	1,332,000 (1,230,000) (102,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000). 1. Perform model development and calibration, hydraulic steel structure inspections, and increased water management activities in FY 2002. 2. None.
Green River Lake	2,309,000 (1,755,000) (554,000)	2,107,000 (1,581,000) (526,000)	1. Conduct periodic inspections in FY 2001. 2. None.
Martins Fork Lake	614,000 (519,000) (95,000)	617,000 (519,000) (98,000)	1. None. 2. None.
Nolin Lake	2,185,000 (1,600,000) (585,000)	1,808,000 (1,740,000) (68,000)	1. None. 2. None.
Paintsville Lake	1,078,000 (1,022,000) (56,000)	1,178,000 (1,107,000) (71,000)	1. None. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Kentucky (continued)			
Rough River Lake	2,037,000 (1,487,000) (550,000)	2,069,000 (1,923,000) (146,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Taylorsville Lake	1,048,000 (1,012,000) (36,000)	993,000 (993,000) (0)	1. Reflects actual cost to operate project in FY 2002. 2. None.
Yatesville Lake	1,197,000 (1,137,000) (60,000)	1,136,000 (1,110,000) (26,000)	1. None. 2. None.
New York			
Mt. Morris Lake	2,307,000 (1,360,000) (947,000)	2,616,000 (1,215,000) (1,401,000)	1. None. 2. Repair dam access road, repave visitor parking area, install perimeter fencing, and debris removal.
Ohio			
Alum Creek Lake	816,000 (668,000) (148,000)	799,000 (706,000) (93,000)	1. None. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Ohio (continued)			
Berlin Lake	4,500,000 (1,781,000) (2,719,000)	1,872,000 (1,388,000) (484,000)	1. Increased operation of recreation areas in FY 2001. 2. None.
Caesar Creek Lake	1,279,000 (1,144,000) (135,000)	1,142,000 (1,131,000) (11,000)	1. None. 2. None.
Clarence J. Brown Dam and Reservoir	925,000 (713,000) (212,000)	723,000 (717,000) (6,000)	1. None. 2. None.
Deer Creek Lake	693,000 (631,000) (62,000)	903,000 (641,000) (262,000)	1. None. 2. None.
Delaware Lake	776,000 (682,000) (94,000)	642,000 (585,000) (57,000)	1. Conduct seismic safety review in FY 2001. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Ohio (continued)			
Dillon Lake	860,000 (553,000) (307,000)	527,000 (442,000) (85,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Michael J. Kirwan Dam and Reservoir	1,033,000 (968,000) (65,000)	809,000 (706,000) (103,000)	1. Perform bridge inspection and increased water management activities in FY 2001. 2. None.
Mosquito Creek Lake	1,134,000 (1,073,000) (61,000)	1,054,000 (976,000) (78,000)	1. Perform periodic inspection and bridge inspection in FY 2001. 2. None.
Muskingum River Lakes	7,849,000 (4,582,000) (3,267,000)	6,284,000 (4,874,000) (1,410,000)	1. None. 2. Remove silt and debris from control houses; construct and install intake gage at Bolivar Reservoir; repair emergency gate guides at intake structure at Beach City Reservoir; purchase hydraulic boom crane and backhoe/endloader at Dover Reservoir; replace emergency gate guide rails at Leesville Reservoir; repair slip on downstream side of Senecaville Dam; replace roofs on intake structures at Mohawk, Pleasant Hill, Piedmont and Beach City Reservoirs.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Ohio (continued)			
North Branch of Kokosing River	493,000 (408,000) (85,000)	358,000 (332,000) (26,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Paint Creek Lake	655,000 (573,000) (82,000)	680,000 (625,000) (55,000)	1. Perform concentrated water quality analysis in FY 2001. 2. None.
Tom Jenkins Dam	296,000 (272,000) (24,000)	229,000 (223,000) (6,000)	1. None. 2. None.
West Fork of Mill Creek Lake	565,000 (540,000) (25,000)	476,000 (476,000) (0)	1. Conduct dam safety training and emergency action plans and formal periodic inspection in FY 2001. 2. None.
William H. Harsha Lake	821,000 (821,000) (0)	816,000 (770,000) (46,000)	1. Perform additional real property inspections in FY 2001. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Pennsylvania			
Conemaugh River Lake	952,000 (863,000) (89,000)	945,000 (822,000) (123,000)	1. None. 2. None.
Crooked Creek Lake	1,491,000 (1,308,000) (183,000)	2,001,000 (1,297,000) (704,000)	1. None. 2. Replace hoist assemblies and wire rope.
East Branch Clarion River Lake	903,000 (802,000) (101,000)	1,322,000 (869,000) (453,000)	1. None. 2. None.
Kinzua Dam and Allegheny Reservoir (PA & NY)	1,377,000 (1,151,000) (226,000)	1,189,000 (1,111,000) (78,000)	1. None. 2. None.
Loyalhanna Lake	1,119,000 (994,000) (125,000)	977,000 (854,000) (123,000)	1. Perform periodic inspection, real property accountability, new outgrants and land use assessments in FY 2001. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Pennsylvania (continued)			
Mahoning Creek Lake	842,000 (701,000) (141,000)	1,093,000 (810,000) (283,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Shenango River Lake (PA & OH)	2,341,000 (2,096,000) (245,000)	2,252,000 (1,849,000) (403,000)	1. Perform periodic inspection in FY 2002. 2. None.
Tionesta Lake	1,658,000 (1,233,000) (425,000)	2,262,000 (1,303,000) (959,000)	1. Perform periodic inspection, bridge inspection, and operation of recreation areas using SRUF funds in FY 2001. 2. None.
Union City Lake	258,000 (203,000) (55,000)	221,000 (208,000) (13,000)	1. None. 2. Replace hoist assemblies and wire rope.
Woodcock Creek Lake	817,000 (737,000) (80,000)	761,000 (708,000) (53,000)	1. None. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Pennsylvania (continued)			
Youghiogheny River	2,126,000	1,871,000	
Lake (PA & MD)	(1,747,000)	(1,481,000)	1. Conduct operation of recreation areas using SRUF funds in FY 2001.
	(379,000)	(390,000)	2. None.
Virginia			
John W. Flannagan	1,403,000	1,387,000	
Dam and Reservoir	(1,281,000)	(1,335,000)	1. None.
	(122,000)	(52,000)	2. None.
North Fork of Pound	522,000	328,000	
River Lake	(376,000)	(322,000)	1. Perform hydraulic steel structure inspection, conduct bridge inspection, conduct dam safety emergency training and emergency action plans in FY 2001.
	(146,000)	(6,000)	2. None.
West Virginia			
Beech Fork Lake	1,139,000	1,074,000	
	(1,057,000)	(1,042,000)	1. None.
	(82,000)	(32,000)	2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
West Virginia (continued)			
Bluestone Lake	4,567,000 (1,192,000) (3,375,000)	1,231,000 (1,029,000) (202,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
			1. Conduct seismic safety review, conduct cultural resource reconnaissance survey, and increased water management activities in FY 2001. 2. None.
Burnsville Lake	1,713,000 (1,399,000) (314,000)	1,783,000 (1,731,000) (52,000)	1. Perform hydraulic steel structure inspection, conduct bridge inspection, increased water management activities, and concentrated water quality analysis in FY 2002. 2. None.
East Lynn Lake	1,921,000 (1,793,000) (128,000)	1,687,000 (1,529,000) (158,000)	1. Perform periodic inspection, perform bridge inspection, conduct water quality analysis for coal mining projects, and perform hydraulic steel structure inspection in FY 2001. 2. None.
R.D. Bailey Lake	1,809,000 (1,522,000) (287,000)	1,582,000 (1,411,000) (171,000)	1. None. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

a. Reservoirs (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
West Virginia (continued)			
Stonewall Jackson Lake	1,026,000 (919,000) (107,000)	888,000 (808,000) (80,000)	1. Cost reduction initiatives have resulted in reductions to staffing and janitorial and mowing services. 2. None.
Summersville Lake	1,543,000 (1,412,000) (131,000)	1,458,000 (1,416,000) (42,000)	1. None. 2. None.
Sutton Lake	1,750,000 (1,477,000) (273,000)	2,016,000 (1,403,000) (613,000)	1. None. 2. Replace tailwater restroom with handicap access, repair eroded concrete in 5 sluices, renovate lift station and sewage treatment plant at Baker's Run campground, upgrade electrical service at campsites, and modernize elevator control system.
TOTAL, Reservoirs	85,262,000 (64,869,000) (20,393,000)	74,868,000 (63,693,000) (11,175,000)	

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

b. Channel Improvements, Inspection and Miscellaneous Maintenance

The program request of \$2,653,000 provides for the annual and periodic maintenance requirements of 7 local protection projects and the inspection of completed works during the budget year.

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>	
	<u>FY 2001</u> <u>TOTAL</u> (Operations) (Maintenance)	<u>FY 2002</u> <u>TOTAL</u> (Operations) (Maintenance)	1.	2.
Kentucky				
Middlesboro	97,000 (75,000) (22,000)	106,000 (78,000) (28,000)	1. None.	2. None.
Michigan				
Sebewaing River	10,000 (7,000) (3,000)	10,000 (7,000) (3,000)	1. None.	2. None.
Ohio				
Massillon	25,000 (0) (25,000)	25,000 (0) (25,000)	1. None.	2. None.
Roseville	30,000 (0) (30,000)	30,000 (0) (30,000)	1. None.	2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

b. Channel Improvements, Inspection and Miscellaneous Maintenance (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
Pennsylvania			
Johnstown	313,000 (13,000) (300,000)	1,115,000 (15,000) (1,100,000)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-). 2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Punxsutawney	13,000 (13,000) (0)	15,000 (15,000) (0)	1. Perform real property, new outgrants and land use assessments in FY 2002. 2. Repair concrete slope at units 1 and 2.
West Virginia			
Elkins	16,000 (16,000) (0)	18,000 (18,000) (0)	1. Perform real property, new outgrants and land use assessments in FY 2002. 2. None.
Other Projects	105,000	0	
Maintained	(0)	(0)	
Periodically	(105,000)	(0)	

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

b. Channel Improvements, Inspection and Miscellaneous Maintenance (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u>	<u>FY 2002 TOTAL</u>	
	(Operations)	(Operations)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Inspection of Completed Works. The \$1,334,000 requested in FY 2002 supports inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, flood walls, drainage structures and pumping plants.			
Illinois	266,000	232,000	
Indiana	124,000	102,000	
Kentucky	99,000	82,000	
Michigan	296,000	205,000	
New York	290,000	299,000	
Ohio	165,000	166,000	
Pennsylvania	30,000	30,000	
Tennessee	7,000	7,000	
West Virginia	204,000	211,000	
Inspection of	1,481,000	1,334,000	
Completed Works	(1,481,000)	(1,334,000)	1. None.
	(0)	(0)	2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (continued)

b. Channel Improvements, Inspection and Miscellaneous Maintenance (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u> (Operations) (Maintenance)	<u>FY 2002 TOTAL</u> (Operations) (Maintenance)	
			1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-).
			2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
TOTAL, Channel Improvements, Inspection and Miscellaneous Maintenance	2,090,000 (1,605,000) (485,000)	2,653,000 (1,467,000) (1,186,000)	
TOTAL - FLOOD CONTROL	87,352,000 (66,474,000) (20,878,000)	77,521,000 (65,160,000) (12,361,000)	

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

3. Multiple Purpose Power

The program request of \$57,336,000 provides for the operational requirements of 10 multiple purpose projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts for day-to-day functioning; periodic maintenance, repairs, and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001</u> <u>TOTAL</u> (Operations) (Maintenance)	<u>FY 2002</u> <u>TOTAL</u> (Operations) (Maintenance)	
Kentucky			
Barkley Dam and Lake Barkley (KY & TN)	8,427,000 (4,188,000) (4,239,000)	6,896,000 (4,236,000) (2,660,000)	1. None. 2. None.
Laurel River Lake	1,310,000 (641,000) (669,000)	1,311,000 (624,000) (687,000)	1. None. 2. None.
Wolf Creek Dam and Lake Cumberland	7,160,000 (3,262,000) (3,898,000)	5,407,000 (3,244,000) (2,163,000)	1. None. 2. None.
Michigan			
St. Marys River	21,793,000 (6,028,000) (15,765,000)	17,418,000 (6,181,000) (11,237,000)	1. None. 2. Repair west center pier, install fire alarm system for entire facility, and maintenance of the locks.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

3. Multiple Purpose Power (continued)

State/ Project Name	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>	
	<u>FY 2001</u> <u>TOTAL</u> (Operations) (Maintenance)	<u>FY 2002</u> <u>TOTAL</u> (Operations) (Maintenance)	1.	2.
Tennessee				
Center Hill Lake	5,203,000 (3,016,000) (2,187,000)	4,757,000 (2,809,000) (1,948,000)	1. None.	2. None.
Cheatham Lock and Dam	5,851,000 (2,505,000) (3,346,000)	4,217,000 (2,539,000) (1,678,000)	1. None.	2. None.
Cordell Hull Dam and Reservoir	4,164,000 (2,313,000) (1,851,000)	3,910,000 (2,309,000) (1,601,000)	1. None.	2. None.
Dale Hollow Lake (TN & KY)	3,995,000 (2,715,000) (1,280,000)	4,217,000 (2,732,000) (1,485,000)	1. None.	2. None.
J. Percy Priest Dam and Reservoir	3,134,000 (2,413,000) (721,000)	3,222,000 (2,360,000) (862,000)	1. None.	2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

3. Multiple Purpose Power (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001 TOTAL</u>	<u>FY 2002 TOTAL</u>	
	(Operations)	(Operations)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
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Tennessee (continued)			
Old Hickory Lock and Dam	6,256,000 (4,094,000) (2,162,000)	5,981,000 (3,938,000) (2,043,000)	1. None. 2. None.
	<hr/>	<hr/>	
TOTAL - MULTIPLE PURPOSE POWER	67,293,000 (31,175,000) (36,118,000)	57,336,000 (30,972,000) (26,364,000)	

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

4. Protection of Navigation

The program request of \$4,986,000 provides for accomplishing project condition surveys for projects where maintenance is not scheduled in the budget year. It also provides for Great Lakes water control monitoring.

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001</u> <u>TOTAL</u> (Operations) (Maintenance)	<u>FY 2002</u> <u>TOTAL</u> (Operations) (Maintenance)	
			1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-).
			2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
Project Condition Surveys. The \$700,000 requested in FY 2002 supports hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the budget request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that users can be advised of channel conditions and future maintenance can be scheduled.			
Illinois	43,000	43,000	
Indiana	42,000	42,000	
Michigan	242,000	275,000	
New York	203,000	238,000	
Ohio	73,000	85,000	
Pennsylvania	14,000	17,000	
Project Condition Surveys	617,000 (617,000) (0)	700,000 (700,000) (0)	1. Variation in number of projects surveyed in FY 2002. 2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

4. Protection of Navigation (continued)

State/ Project Name	ESTIMATED OBLIGATIONS (\$)		Reason For Change and Major Maintenance Items
	FY 2001	FY 2002	
	TOTAL	TOTAL	
	(Operations)	(Operations)	1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
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<p>Surveillance of Northern Boundary Waters. The \$4,286,000 requested in FY 2002 supports meeting U.S. obligations under provisions of boundary water treaties and other international agreements. Data collection includes current velocity measurements, presence and intensity of ice, water levels, land use patterns and estimating potential damages caused by extreme levels. This information can be used to enhance water level forecasts, develop crises response plans, and provide advance warning to area residents and waterway users of impending floods or ice jams.</p>			
Illinois	96,000	97,000	
Indiana	89,000	90,000	
Michigan	3,152,000	3,295,000	
New York	441,000	479,000	
Ohio	176,000	190,000	
Pennsylvania	60,000	65,000	
Wisconsin	41,000	42,000	
Minnesota	27,000	28,000	
Surveillance of	4,082,000	4,286,000	
Northern Boundary	(4,082,000)	(4,286,000)	1. None.
Waters	(0)	(0)	2. None.

**GREAT LAKES AND OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE**

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

4. Protection of Navigation (continued)

<u>State/ Project Name</u>	<u>ESTIMATED OBLIGATIONS (\$)</u>		<u>Reason For Change and Major Maintenance Items</u>
	<u>FY 2001</u> <u>TOTAL</u> (Operations) (Maintenance)	<u>FY 2002</u> <u>TOTAL</u> (Operations) (Maintenance)	
			1. Reason for Change in Operations from FY 2001 to FY 2002 (10% +/-).
			2. Major Maintenance Items Budgeted in FY 2002 (Threshold \$500,000).
TOTAL - PROTECTION OF NAVIGATION	4,699,000 (4,699,000) (0)	4,986,000 (4,986,000) (0)	
GRAND TOTAL - GREAT LAKES AND OHIO RIVER DIVISION	355,446,000 (170,470,000) (184,976,000)	330,407,000 (170,057,000) (160,350,000)	